43621

ENGLISH BOTANY;

OR,

COLOURED FIGURES

OF

BRITISH PLANTS,

WITH THEIR

ESSENTIAL CHARACTERS, SYNONYMS, AND PLACES OF GROWTH.

TO WHICH WILL BE ADDED,

OCCASIONAL REMARKS.

BY

JAMES EDWARD SMITH, M.D. F.R.S.

MEMBER OF THE IMP. ACAD. NATURÆ CURIOSORUM, THE ACADEMIES OF STOCKHOLM, UPSAL, TURIN, LISBON, LUND, BERLIN, PHILADELPHIA, AND THE NAT. HIST. SOCIETY OF PARIS;

PRESIDENT OF THE LINNÆAN SOCIETY.

THE FIGURES BY

JAMES SOWERBY, F.L.S.

——"VIRESQUE ACQUIRIT EUNDO."——*Virg.*

VOL. XII.

LONDON:

PRINTED BY WILKS AND TAYLOR, CHANCERY-LANE;

And sold by the Proprietor, J. SOWERBY, at No. 2, Mead Place, Lambeth; by Messrs. WHITE, Fleet-street; JOHNSON, St. Paul's Church-yard; DILLY, in the Poultry; and by all Booksellers, &c. in Town and Country.

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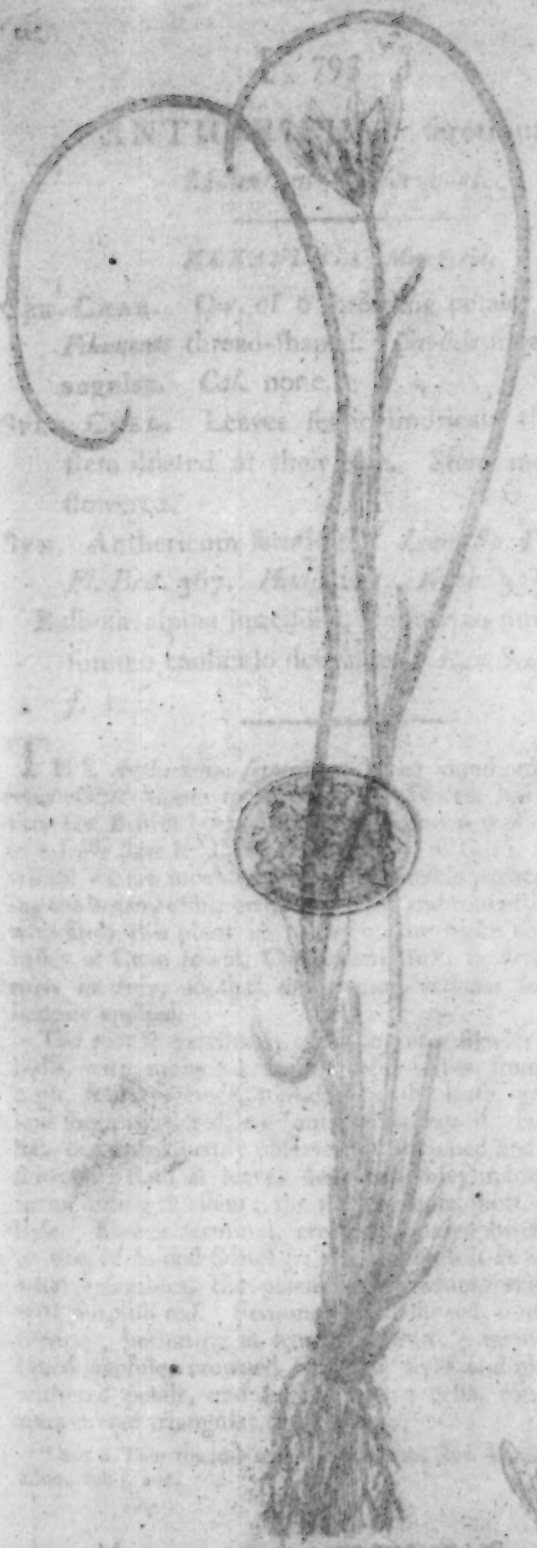
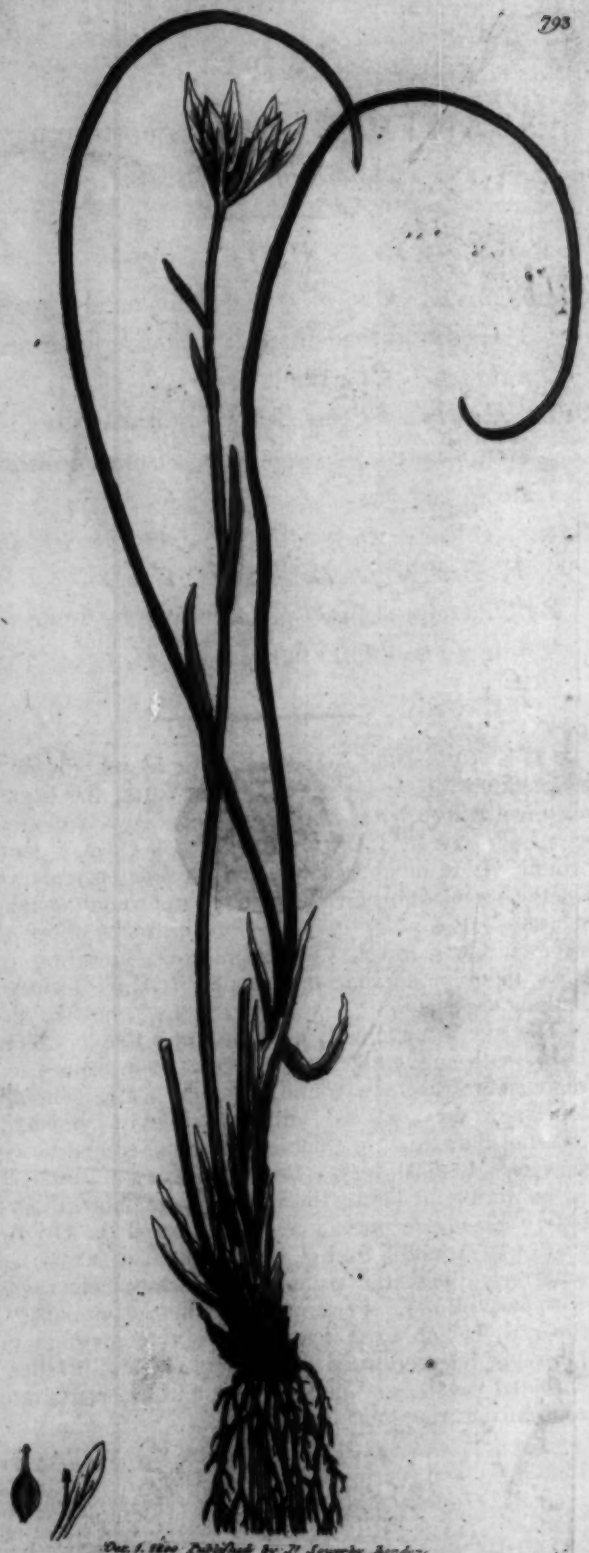




Oct. 1. 1800 Published by J. Sowerby, London.

ANTHERICUM ſerotinum.

Mountain Spiderwort.

HEXANDRIA Monogynia.

GEN. CHAR. *Cor.* of 6 ſpreading petals, permanent. *Filaments* thread-ſhaped. *Capſule* ſuperior. *Seeds* angular. *Cal.* none.

SPEC. CHAR. Leaves ſemicylindrical; thoſe on the ſtem dilated at their baſe. Stem moſtly ſingle-flowered.

SYN. Anthericum ſerotinum. *Linn. Sp. Pl.* 444. *Sm. Fl. Brit.* 367. *Hudſ.* 144. *With.* 339. *Hull.* 73. Bulboſa alpina juncifolia, pericarpio unico erecto in ſummo cauliculo dodrantali. *Raii Syn.* 374. *t.* 17. *f.* 1.

THE *Anthericum ſerotinum*, being found only on the moſt inacceſſible alpine rocks of North Wales, has been ſeen by very few Britiſh botaniſts. Our ſpecimen was communicated in a freſh ſtate by J. W. Griffith, Eſq. of Garn, a gentleman to whom we are indebted for many valuable particulars concerning the botany of his own ſequeſtered and romantic country, and who finds this plant in plenty on the rocks above the alpine valley of Cwm Idwel, Carnarvonſhire*, flowering in June or early in July, ſo that the name *ſerotinum* ſeems not very happily applied.

The root is perennial, conſiſting of a ſlender oblong curved bulb, with many fibres at its baſe. Stem from 3 to 6 inches high, ſolitary, erect, round, ſmooth, leafy, generally ſimple and ſingle-flowered, as Linnæus defines it; but Mr. Griffith has not unfrequently obſerved it branched and bearing many flowers. Radical leaves ſlender, ſemicylindrical or angular, ſurmounting the ſtem; the reſt alternate, ſhort, dilated at their baſe. Flower terminal, erect, compared by Dr. Richardſon to that of Wood Sorrel (*t.* 762), which it at firſt ſight ſomewhat reſembles, the petals being white, externally veined with purpliſh red. Stamina thread-ſhaped, ſmooth. Germen ſuperior, becoming at length an obtuſe membranous three-lobed capſule, crowned with the ſtyle and inveſted with the withered petals, and divided into 3 cells, containing numerous curved triangular ſtriated ſeeds.

* See a Tour round North Wales, by the Rev. W. Bingley, publiſhed 1800, vol. i. 209.

Oct. 1. 1800. Published by Jas Sowerby, London.

SAXIFRAGA cæſpitoſa.

Tufted Alpine Saxifrage.

DECANDRIA Digynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Capſ.* with 2 beaks, 1 cell, and many *ſeeds.*

SPEC. CHAR. Radical leaves cluſtered, fleſhy, linear, undivided or three-cleft, ribbed beneath. Stem almoſt naked, bearing one or two flowers.

SYN. Saxifraga cæſpitoſa. *Linn. Sp. Pl.* 578. *Sm. Fl. Brit.* 455.

FOR this plant alſo we are obliged to Mr. Griffith, who diſcovered it on the rocks about Cwm Idwel growing very ſparingly, flowering in June. It affords us a fortunate opportunity of exhibiting, and fixing as a Britiſh ſpecies, the certain plant of Linnæus; for, if Dr. Withering be right, the *S. cæſpitoſa* of Hudſon is no other than Jacquin's *moſchata*, to which perhaps all the ſynonyms, applied in *Sp. Pl.* to the true *cæſpitoſa*, really belong. Even the figure of Scopoli, the only one I ventured to quote in the *Fl. Britannica*, I am now ſatisfied is rightly referred by Jacquin to his *muſcoides*.

The true *S. cæſpitoſa*, of which the Linnæan herbarium contains abundant ſpecimens, has a perennial root, crowned with denſe tufts of fleſhy linear blunt leaves, each with a triple nerve beneath; of which the lowermoſt are undivided, the reſt three-cleft, ſometimes five-cleft. Stem about two inches high, erect, bearing a few linear (rarely three-cleft) bracteæ, and terminated by one or two large cream-coloured flowers. Calyx hemiſpherical, clothed like the herbage with prominent, glandular, not woolly, hairs, but its teeth are ſmoother and blunt. Petals obovate, entire, blunt, with a triple nerve. Germen almoſt entirely inferior.

It is much to be wiſhed that ſome accurate botaniſt would aſcertain whether it be this ſpecies, the *moſchata*, or the *muſcoides*, that grows about Ambleſide,

Oct.1.1800 Published by J.Sowerby

EPILOBIUM parviflorum.

Small-flowered hoary Willow-herb.

OCTANDRIA Monogynia.

GEN. CHAR. *Cal.* in 4 ſegments. *Petals* 4. *Capſ.* oblong, inferior. *Seeds* feathered.

SPEC. CHAR. Leaves ſeſſile, lanceolate, downy. Stem nearly ſimple, woolly. Root fibrous.

SYN. Epilobium parviflorum. *With.* 367. *Sm. Fl. Brit.* 410. *Hull.* 82.

E. villoſum. *Curt. Lond. faſc.* 2. *t.* 22. *Relh.* 152. *Sibth.* 121. *Abbot.* 84.

E. hirſutum. *Hudſ.* 161. *Linn. Sp. Pl.* 494, β.

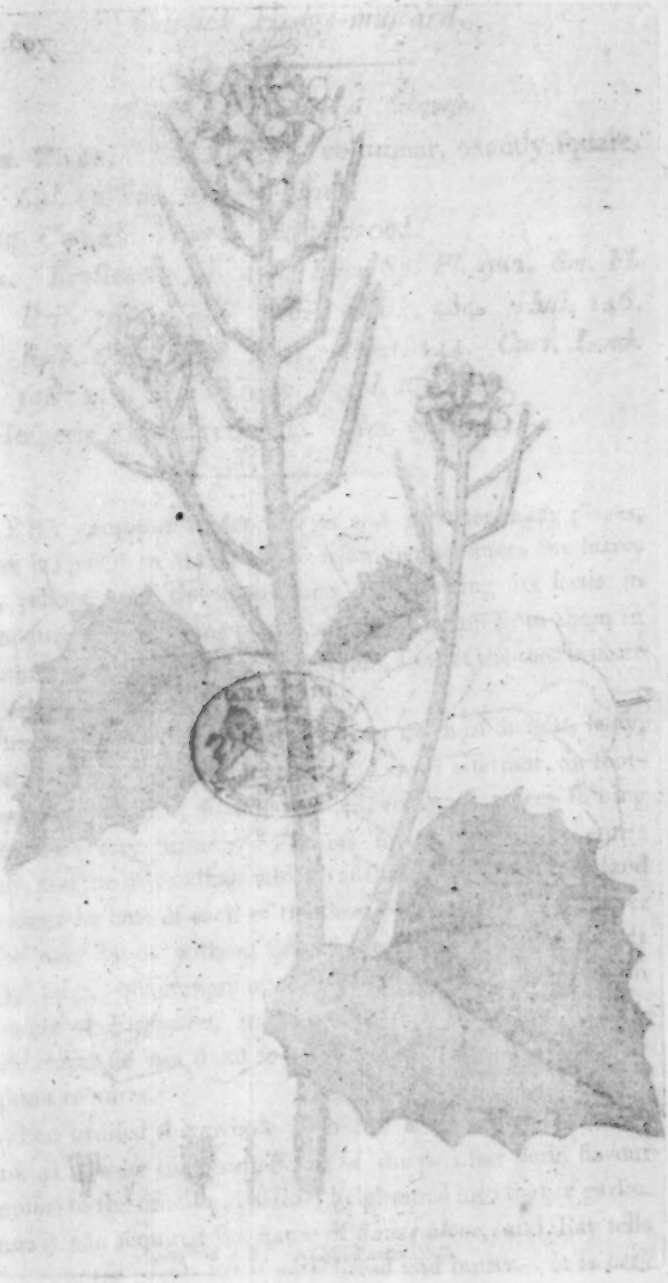
Lyſimachia ſiliquoſa hirſuta parvo flore. *Raii Syn.* 311.

FREQUENT in watery places, and about the banks of rivers, flowering in July.

Mr. Curtis has well diſtinguiſhed this from the common great-flowered Willow-herb, called (on account of its ſmell) Codlings and Cream; but he ought to have retained the name of *parviflorum*, previouſly given by Schreber and Withering. Mr. Hudſon has committed a different fault in taking the plant before us for the real *E. birſutum* of Linnæus; whereas it is his variety β.

The root is perennial, fibrous and branched. Stem ſcarcely 2 feet high, ſimple, or but little branched, round, leafy, clothed with ſoft woolly hairs. Leaves clothed with ſimilar hairs, oppoſite, ſeſſile, minutely toothed; the upper ones alternate. Flowers in a terminal leafy corymbus, at length becoming a ſpike. Petals obcordate, roſe-coloured or purpliſh. Stigma four-cleft, in which particular this differs from the only two ſpecies of *Epilobium* already figured in our work.

The great *E. birſutum* above alluded to is eaſily known by its creeping root, tall branching ſtem, broad leaves, and much larger flowers.



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ERYSIMUM Alliaria.

Garlick Hedge-muſtard.

TETRADYNAMIA Siliquoſa.

GEN. CHAR. *Pod* ſtraight, columnar, exactly ſquare. *Cal.* cloſed. *Stigma* blunt.

SPEC. CHAR. Leaves heart-ſhaped.

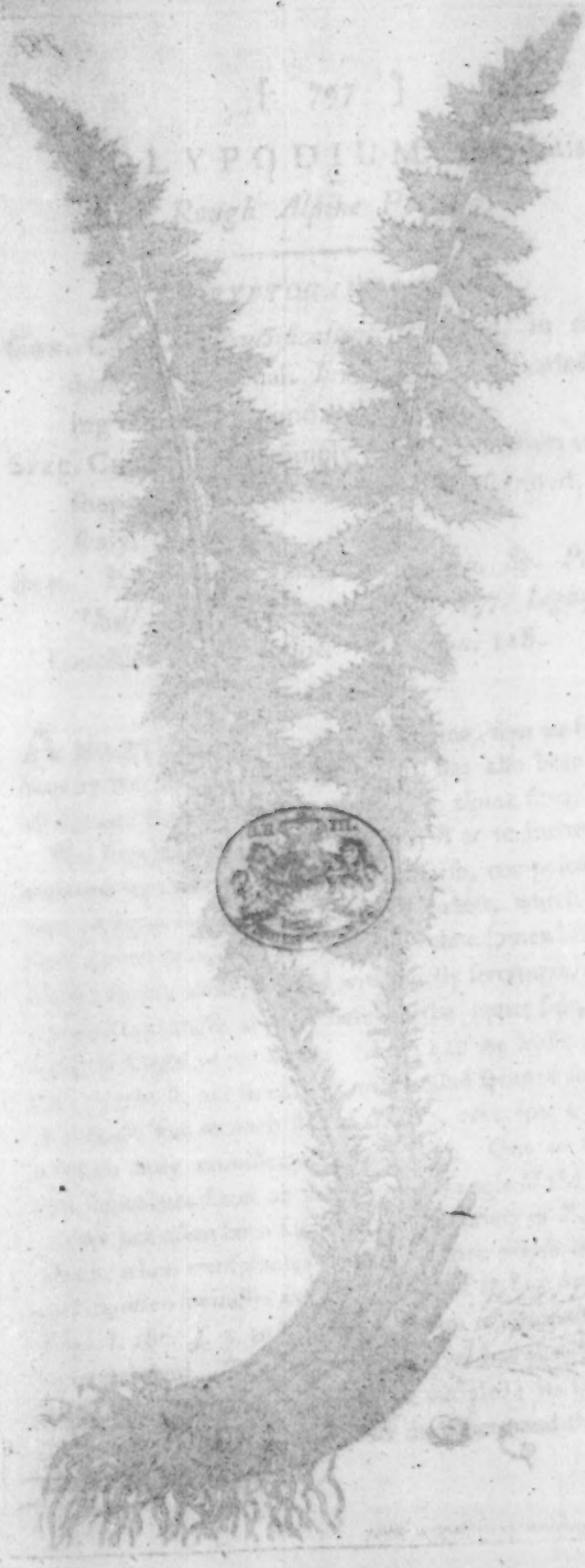
SYN. Eryſimum Alliaria. *Linn. Sp. Pl.* 922. *Sm. Fl. Brit.* 708. *Hudſ.* 286. *With.* 584. *Hull.* 146. *Relh.* 251. *Sibth.* 201. *Abbot.* 144. *Curt. Lond. faſc.* 2. *t.* 48. *Woodv. Suppl. t.* 245.

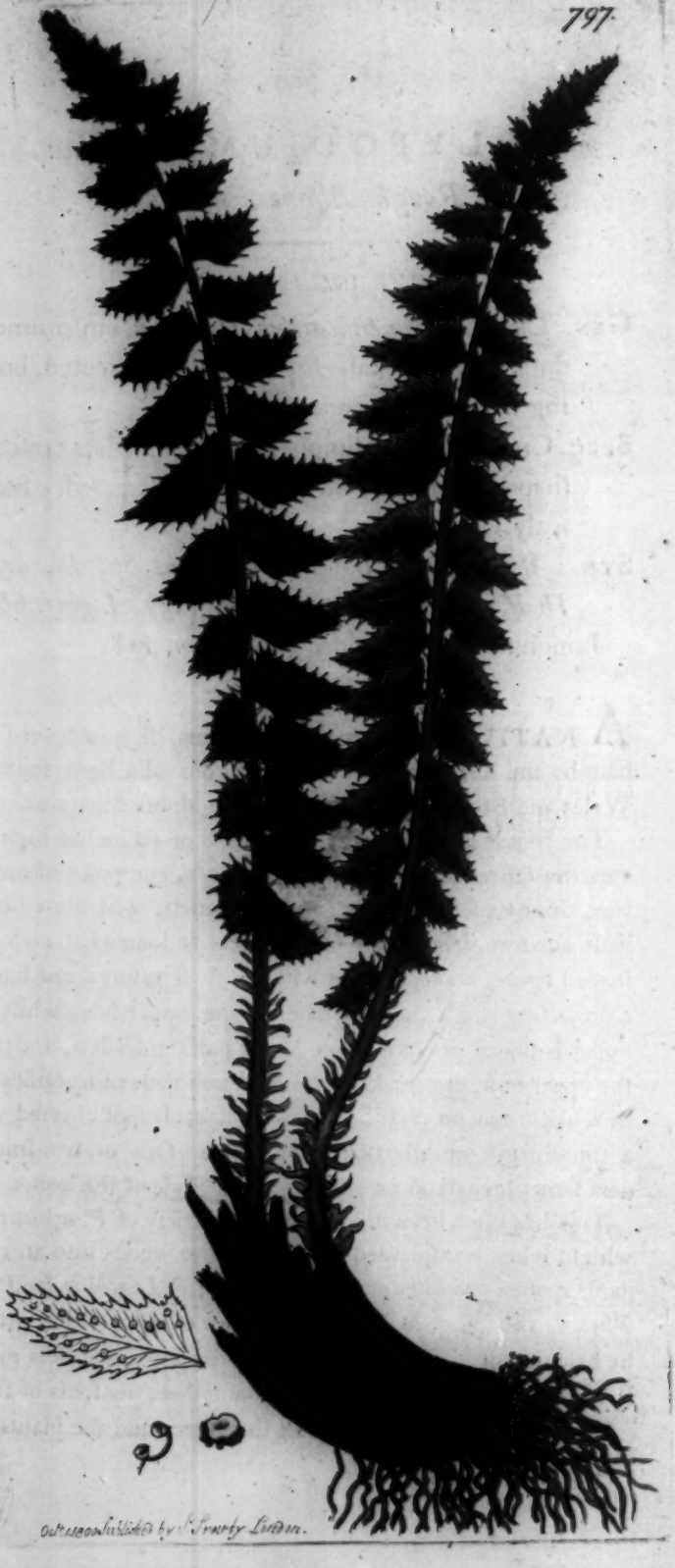
Heſperis Allium redolens. *Raii Syn.* 293.

VERY common under hedges and in other ſhady places, where it flowers in May. As the ſummer advances the leaves turn yellow, and the plant ſoon dies, ſowing its ſeeds in abundance. The young plants which ſpring up from them in autumn generally flower the next ſeaſon, ſo that the root is more properly annual than biennial.

The ſtem is upright, about a foot or more in height, leafy, a little branched in the upper part. Leaves alternate, on foot-ſtalks, heart-ſhaped, broad, toothed, veiny, of a deep ſhining green, and very ſmooth. Flowers ſmall, with white entire petals, and the calyx alſo is whitiſh at the baſe. A notched gland embraces the baſe of each of the ſhorter ſtamina, and a ſmaller entire one ſtands without ſide of the longer ſtamina. Pods erect, long, quadrangular, which laſt is the moſt certain character of *Eryſimum*, and obliges us to overlook the calyx, whoſe leaves do not ſtand ſo cloſe together as the generic deſcription requires.

When bruiſed this whole herb has a ſtrong ſmell, which ſeems as it were the quinteſſence of the peculiar acrid flavour common to the cruciform plants, heightened into that of garlic. Hence it has acquired the name of *Sauce alone*, and Ray tells us the country people eat it with bread and butter. It is certainly the cheapeſt article of the three.





Published by J. Sowerby London.

POLYPODIUM Lonchitis.

Rough Alpine Polypody.

CRYPTOGAMIA Filices.

GEN. CHAR. *Fructifications* ſcattered, in roundiſh dots, not marginal. *Involucrum* umbilicated, burſting almoſt all round.

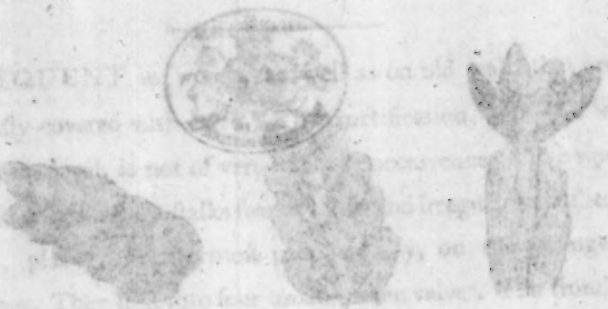
SPEC. CHAR. Frond ſimply pinnate; leaflets creſcent-ſhaped, bent downwards, briſtly-ſerrated. Stalks ſcaly.

SYN. Polypodium Lonchitis. *Linn. Sp. Pl.* 1548. *Hudſ.* 455. *With.* 773. *Hull.* 237. *Lightf.* 668. Lonchitis aſpera major. *Raii Syn.* 118.

A NATIVE of high rocky mountains, ſent us from Durham by the Rev. Mr. Harriman. It has alſo been found in Wales and Scotland, but is confined to alpine ſituations.

The fronds grow in tufts, upright, 8 or 10 inches high, of a narrow lanceolate figure, rigid and harſh, compoſed of numerous alternate ſeſſile ſimple *pinnæ* or leaflets, which are bent a little downwards, and are of a lanceolate ſomewhat creſcent-ſhaped figure, acute, fringed with briſtly ſerratures, and having a projecting angle at their baſe on the upper ſide, while the under is ſloped or cut away. About half the leaflets, and thoſe the uppermoſt, are thickly ſet with round ſpots of fructification in a ſingle line on each ſide of the rib, each ſpot covered with a round truly umbilicated involucrum. One or two ſmaller dots ſometimes ſtand on the projecting angle of the leaflet.

This has often been ſuppoſed a mere variety of *P. aculeatum*, which, when tranſplanted from its native woods into an open garden, often dwindles away to the ſize of *P. Lonchitis*, ſee *Pluk. Phyt. t.* 180. *f.* 3, as Mr. W. Brunton of Rippon has proved by experiment. The *Lonchitis* however has the leaflets much leſs inclined to be lobed, and never auricled; its ſpots of fructification are thrice as large as in the other, and the plants are manifeſtly different.



Oct.1.1800 Published by J. Sowerby, London.

JUNGERMANNIA platyphylla.

Wall Jungermannia.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male flowers ſeſſile.

Female on a ſtalk riſing from a ſheath. *Capſ.* with 4 valves. *Seeds* attached to elaſtic filaments.

SPEC. CHAR. Fronds procumbent, much branched, ſpreading, triply auricled beneath. Leaves heart-ſhaped, obtuſe. Sheaths toothed.

SYN. Jungermannia platyphylla. *Linn. Sp. Pl.* 1600. *Hudſ.* 515. *With.* 879. *Hull.* 280. *Relh.* 419. *Sibth.* 312. *Abbot.* 254.

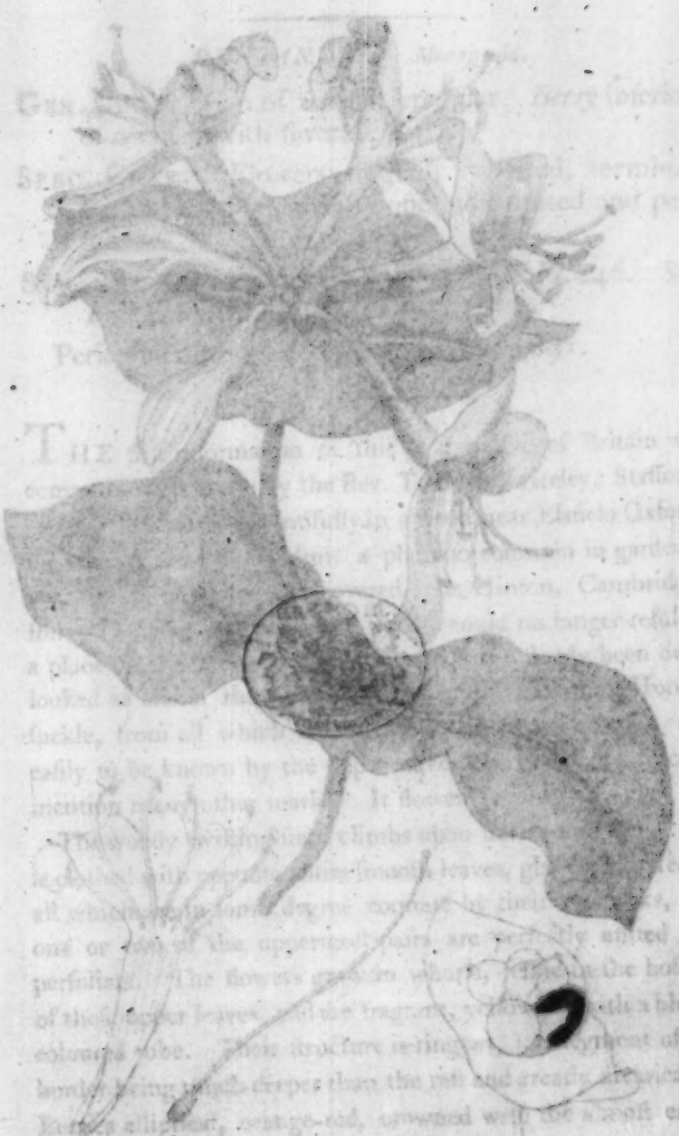
Lichenaſtrum imbricatum majus. *Raii Syn.* 111.

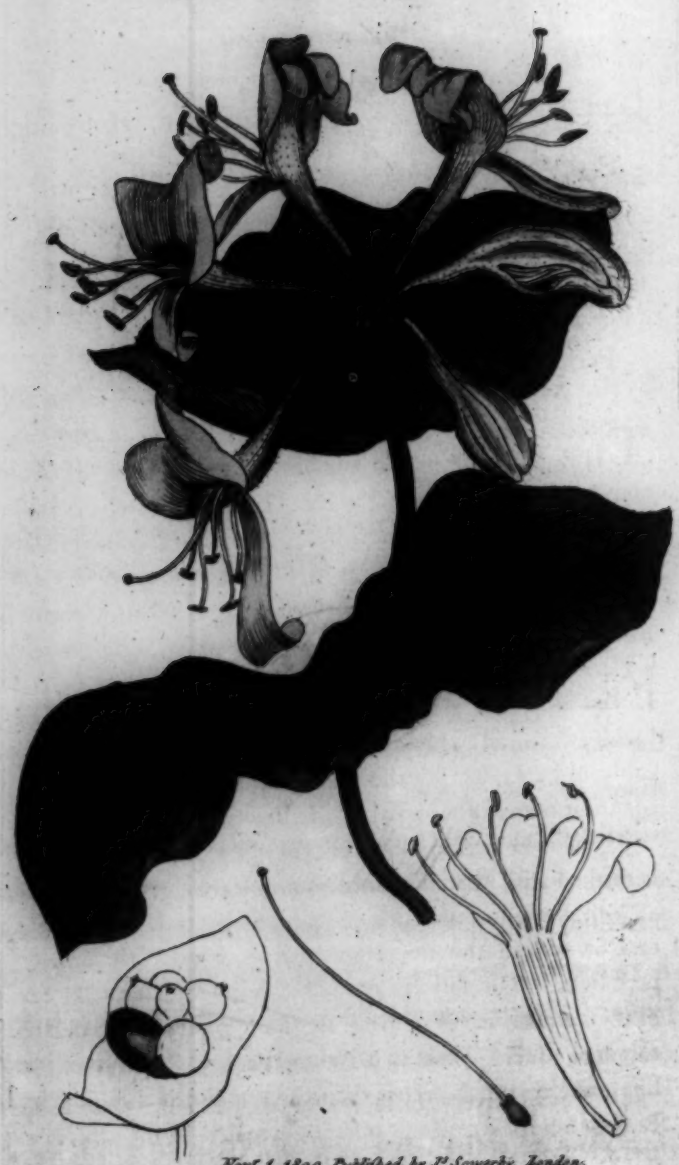
L. Arboris vitæ facie, foliis minus rotundis. *Dill. Muſc.* 501. *t.* 72. *f.* 32.

FREQUENT in woods, as well as on old walls that are copiouſly covered with earth. The fructification, produced in March or April, is not of very frequent occurrence. The ripe capſules grow on ſhort ſtalks from a lobed and irregularly toothed ſheath, placed, for the moſt part laterally, on the younger branches. They ſplit into four broad brown valves. The fronds lie one over another forming broad looſe patches of a full graſs green. They are compoſed of numerous ſubdivided ſpreading branches, thickly clothed with two rows of imbricated heart-ſhaped blunt convex entire leaves, connected beneath by a triple row of entire ovate auricles. This is readily known from all our other ſpecies by its general form, ſize, and colour. That to which it has moſt affinity is the *J. complanata.*

LONICERA Caprifolium.

Pale perfoliate Honeysuckle.





Novr 1. 1800. Published by J. Sowerby, London.

LONICERA Caprifolium.

Pale perfoliate Honeyſuckle.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* of 1 petal, irregular. *Berry* inferior, of 2 cells, with ſeveral *ſeeds.*

SPEC. CHAR. Flowers ringent, whorled, terminal. Leaves deciduous; the uppermoſt united and perfoliate.

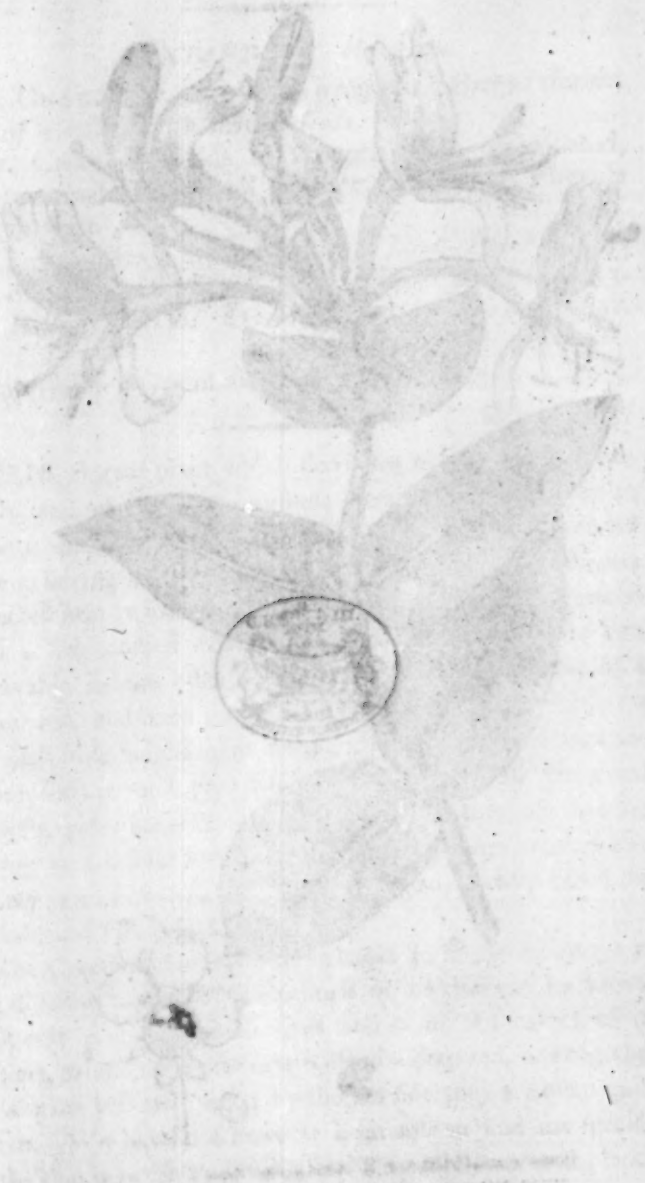
SYN. Lonicera Caprifolium. *Linn. Sp. Pl.* 246. *Sm. Fl. Brit.* 260.

Periclymenum perfoliatum. *Ger.em.*891.

THE firſt information of this as a native of Britain was communicated to me by the Rev. T. Butt of Areley, Staffordſhire, who found it plentifully in a wood near Elsfield Oxfordſhire. I heſitated to admit a plant ſo common in gardens; but Mr. Relhan having diſcovered it at Hinton, Cambridgeſhire, in his opinion certainly wild, I could no longer refuſe it a place in the *Flora Britannica*. It has probably been overlooked as one of the many varieties of the Common Honeyſuckle, from all which however it is perfectly diſtinct, and eaſily to be known by the upper leaves being perfoliate, not to mention many other marks. It flowers in May or June.

The woody twiſting ſtem climbs upon buſhes and trees, and is clothed with oppoſite entire ſmooth leaves, glaucous beneath, all which are in ſome degree connate by their footſtalks, but one or two of the uppermoſt pairs are perfectly united and perfoliate. The flowers grow in whorls, ſeſſile in the boſoms of theſe upper leaves, and are fragrant, yelloviſh, with a bluſh-coloured tube. Their ſtructure is ringent, one ſegment of the border being much deeper than the reſt and greatly divaricated. Berries elliptical, orange-red, crowned with the almoſt entire calyx.

The fruit only in our figure is taken from a garden ſpecimen, the reſt from a wild one gathered at Hinton by J. Holme Eſq. of Peter-houſe, Cambridge.



Nov.r 1. 1800. Published by Jas Sowerby, London.

LONICERA Periclymenum.

Common Honeyſuckle, or Woodbine.

PENTANDRIA Monogynia.

GEN. CHAR. *Cor.* of 1 petal, irregular. *Berry* inferior, of 2 cells, with ſeveral *ſeeds*.

SPEC. CHAR. Heads of flowers ovate, imbricated, terminal. Leaves all ſeparate, deciduous. Flowers ringent.

SYN. Lonicera Periclymenum. *Linn. Sp. Pl.* 247. *Sm. Fl. Brit.* 260. *Hudſ.* 94. *With.* 246. *Hull.* 53. *Relh.* 93. *Sibth.* 81. *Abbot.* 49. *Curt. Lond. faſc.* 1. *t.* 15.

Caprifolium Germanicum. *Raii Syn.* 458.

THIS elegant plant which decorates our hedges ſo abundantly, and whoſe flowers perfume the air ſo delightfully in an evening or after rain, differs eſſentially from that in the laſt plate in having all the leaves diſtinct, not perfoliate, the flowers collected into an ovate head, not axillary, and the fruit crowned with a five-toothed calyx, inſtead of the nearly entire rim obſervable in the other. The berries are alſo rounder, of a darker red, and often roughiſh. The twining ſtem climbs to a conſiderable height upon trees and buſhes. The leaves are entire, for the moſt part ſeſſile, generally of a full green and ſmooth, paler beneath, often hairy, and in that caſe they are all over of a lighter hue. There ſometimes occurs a remarkable variety with ſinuated, generally variegated, leaves, called the Oak-leaved Honeyſuckle.

The Common Honeyſuckle is liable to many variations in the different degrees of ſmoothneſs or hairineſs of its leaves, fruit and younger branches, as well as in the colour of its flowers, which are either externally of a deep red, or altogether of a pale yellowiſh hue; by the ſea ſide they are often quite green. We have not however been able to find any ſpecific diſtinction between theſe varieties. They all flower moſt plentifully in June and July, but occaſionally throughout the autumn alſo.

Nov.r 1. 1800 Published by J.s Sowerby, London.

JUNCUS uliginoſus.

Little bulbous Ruſh.

HEXANDRIA Monogynia.

GEN. CHAR. *Cal.* of 6 leaves, permanent. *Cor.* none. *Capſ.* ſuperior, of 3 valves, with 1 or 3 cells. *Seeds* ſeveral. *Stigmas* 3.

SPEC. CHAR. Leaves ſetaceous, obſcurely jointed within. Flowers about three together in a kind of proliferous cluſter. Stem bulbous, taking root at its joints.

SYN. Juncus uliginoſus. *Sibth.* 115. *Sm. Fl. Brit.* 380. *With.* 348. *Hull.* 76.

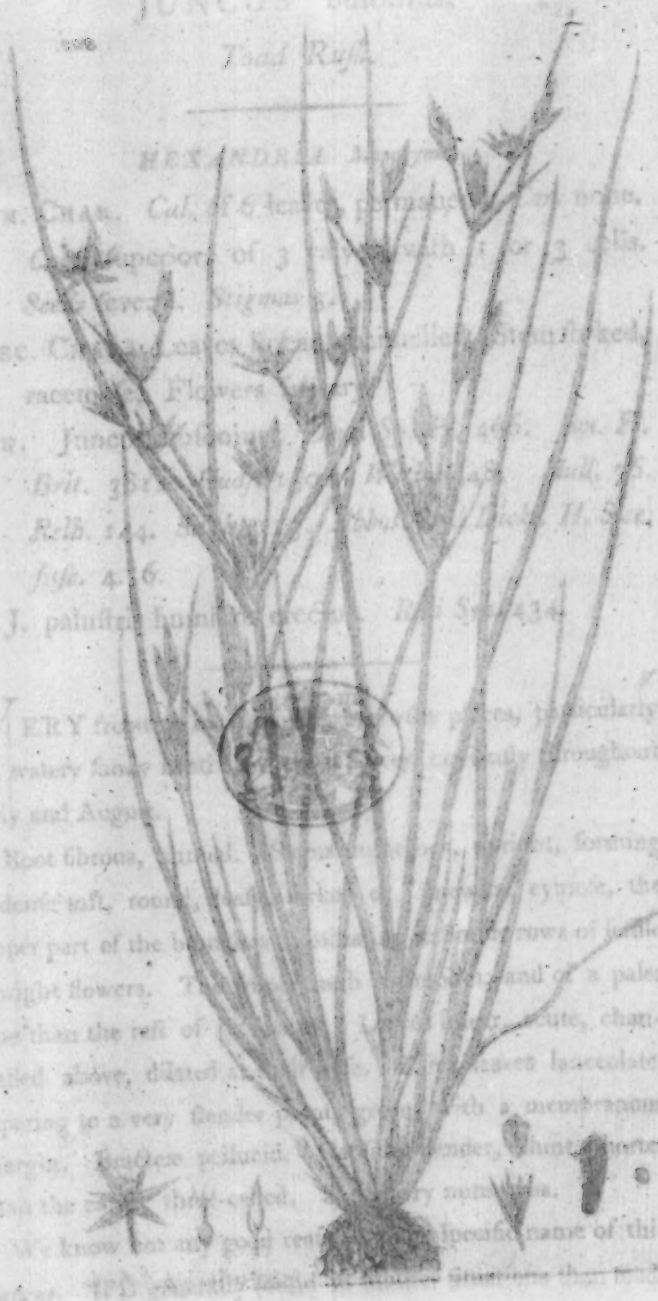
J. viviparus. *Relh.* 143. *Abbot.* 79.

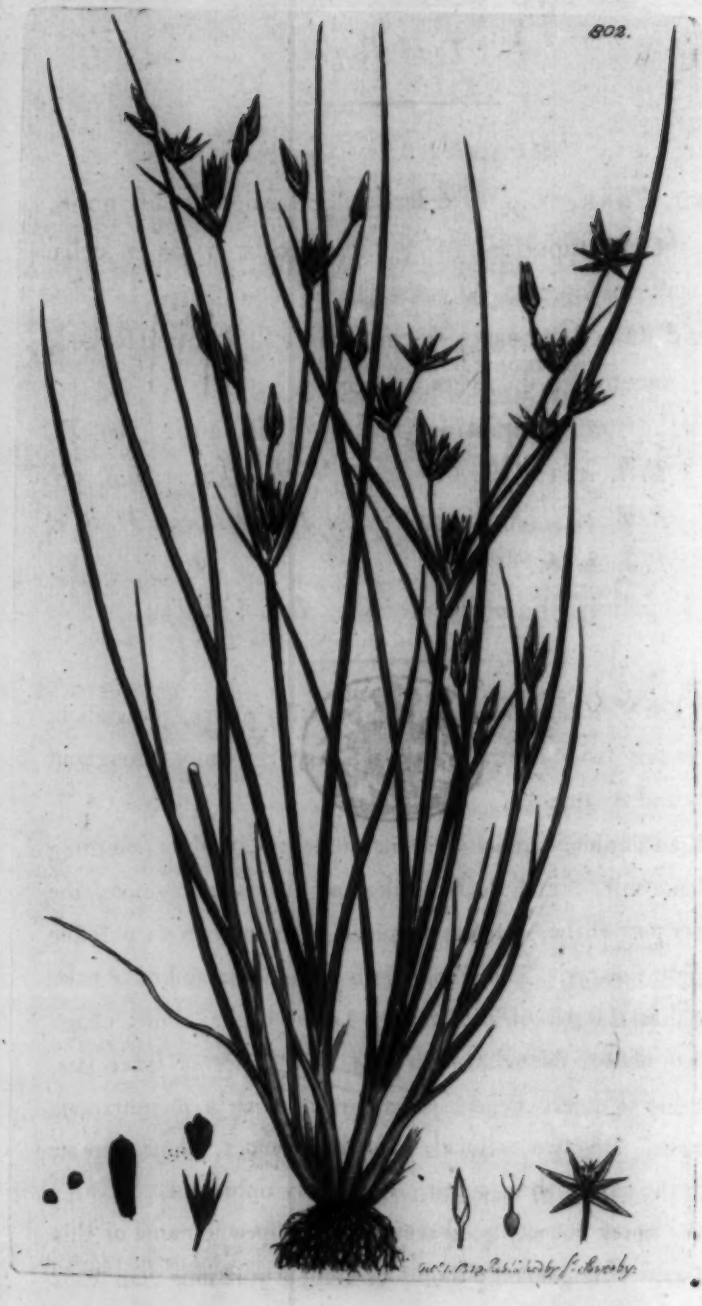
J. articulatus γ. *Hudſ.* 150.

Gramen junceum capſulis triangulis minimum. *Raii Syn.* 434.

MOIST ſandy or turfy heaths often abound with this ſmall ſpecies of ruſh, which has by ſome botaniſts been referred to the *Juncus articulatus*, becauſe its leaves are ſlightly jointed, or at leaſt ſeparated internally into cells; and by others to *J. bulboſus*, on account of the bulbous baſe of its ſtem. In the laſt reſpect it indeed much more truly anſwers to the name *bulboſus* than the plant to which Linnæus applied that denomination.

J. uliginoſus is unqueſtionably a very diſtinct ſpecies. The root is perennial and fibrous. Stems bulbous at their baſe and clothed with the broad red ſheaths of the radical leaves; in the upper part they are ſlender, leafy, branched in a proliferous manner, at firſt almoſt erect, but ſoon lying down, and taking root at their joints. Leaves all ſlender, tapering, acute, not perceptibly jointed on the outſide, ſmooth. Flowers about three together, lateral or terminal. Bracteæ ſmall, acute. Calyx-leaves acute, three-nerved, generally browniſh. Capſule blunt, with three very ſharp angles. It bloſſoms in June or July, and in wet ſeaſons is often viviparous; ſee *Fl. Brit.* β.




802.

JUNCUS bufonius.

Toad Ruſh.

HEXANDRIA Monogynia.

GEN. CHAR. *Cal.* of 6 leaves, permanent. *Cor.* none. *Capſ.* ſuperior, of 3 valves, with 1 or 3 cells. *Seeds* ſeveral. *Stigmas* 3.

SPEC. CHAR. Leaves linear, channelled, Stem forked, racemoſe. Flowers ſolitary.

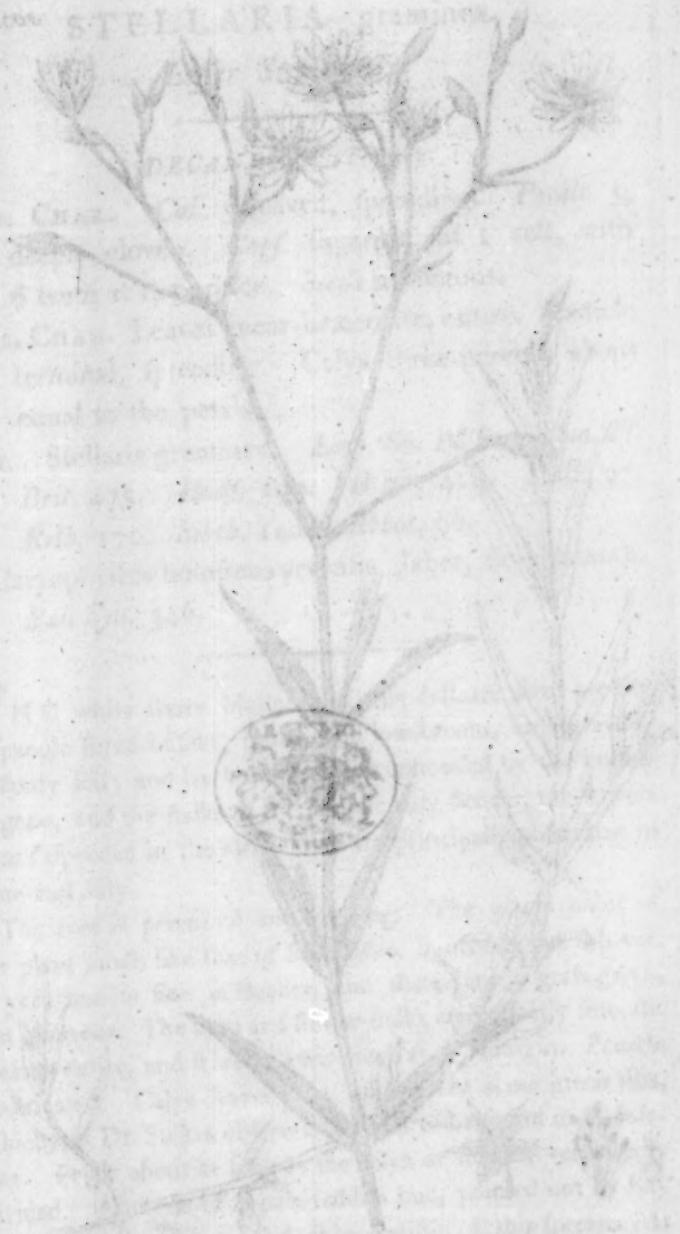
SYN. Juncus bufonius. *Linn. Sp. Pl.* 466. *Sm. Fl. Brit.* 381. *Hudſ.* 150. *With.* 348. *Hull.* 76. *Relh.* 144. *Sibth.* 115. *Abbot.* 80. *Dickſ. H. Sicc. faſc.* 4. 6.

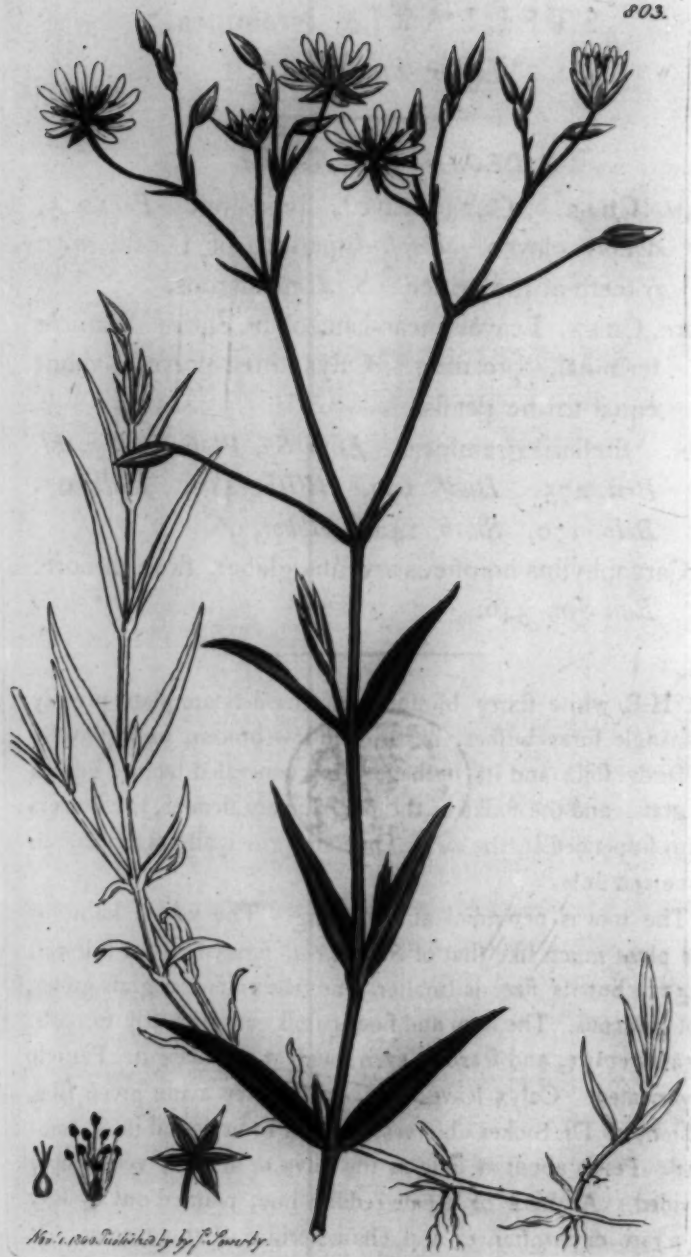
J. paluſtris humilior erectus. *Raii Syn.* 434.

VERY frequent in all kinds of marſhy places, particularly on watery ſandy heaths, where it flowers copiouſly throughout July and Auguſt.

Root fibrous, annual. Stems numerous, upright, forming a denſe tuft, round, leafy, forked or ſomewhat cymoſe, the upper part of the branches terminating in ſimple rows of ſeſſile upright flowers. The whole herb is ſmooth, and of a paler hue than the reſt of its ſpecies. Leaves linear, acute, channelled above, dilated at their baſe. Calyx-leaves lanceolate, tapering to a very ſlender point, green, with a membranous margin. Bracteæ pellucid. Capſule ſlender, blunt, ſhorter than the calyx, three-celled. Seeds very numerous.

We know not any good reaſon for the ſpecific name of this *Juncus*. It is generally found in moiſter ſituations than toads for the moſt part inhabit.





Nov.1.1803. Published by J.Sowerby.

STELLARIA graminea.

Leſſer Stitchwort.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* 5-leaved, ſpreading. *Petals* 5, deeply cloven. *Capſ.* ſuperior, of 1 cell, with 6 teeth at the orifice. *Seeds* numerous.

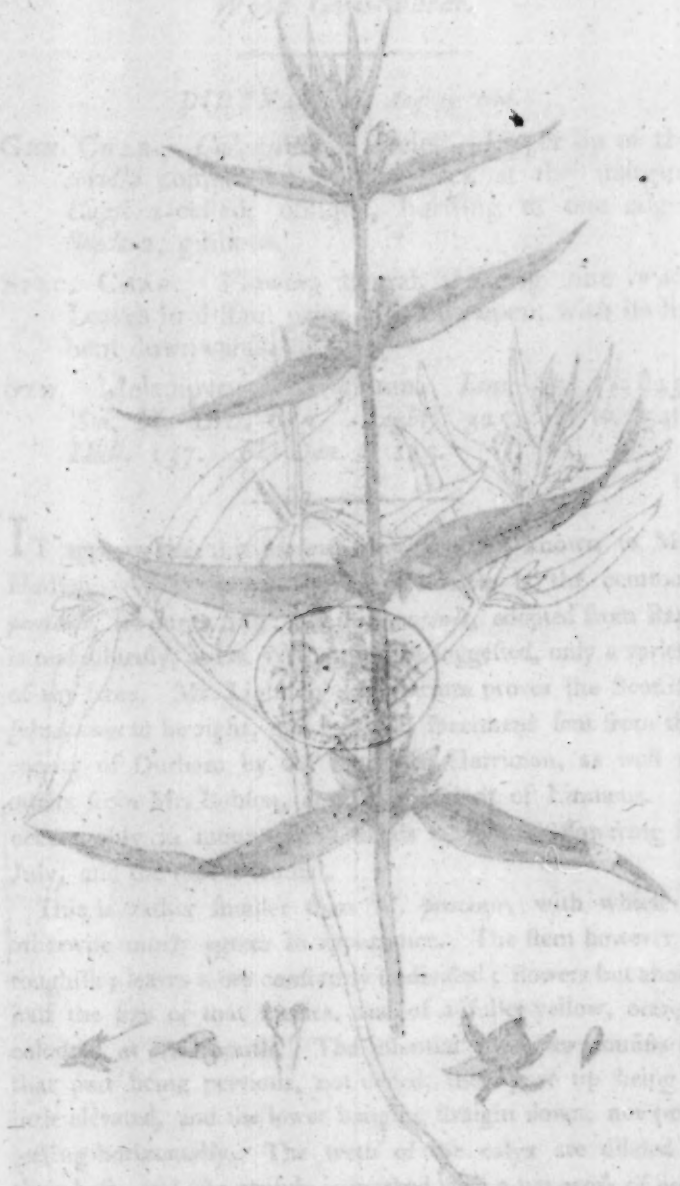
SPEC. CHAR. Leaves linear-lanceolate, entire. Panicle terminal, ſpreading. Calyx three-nerved, about equal to the petals.

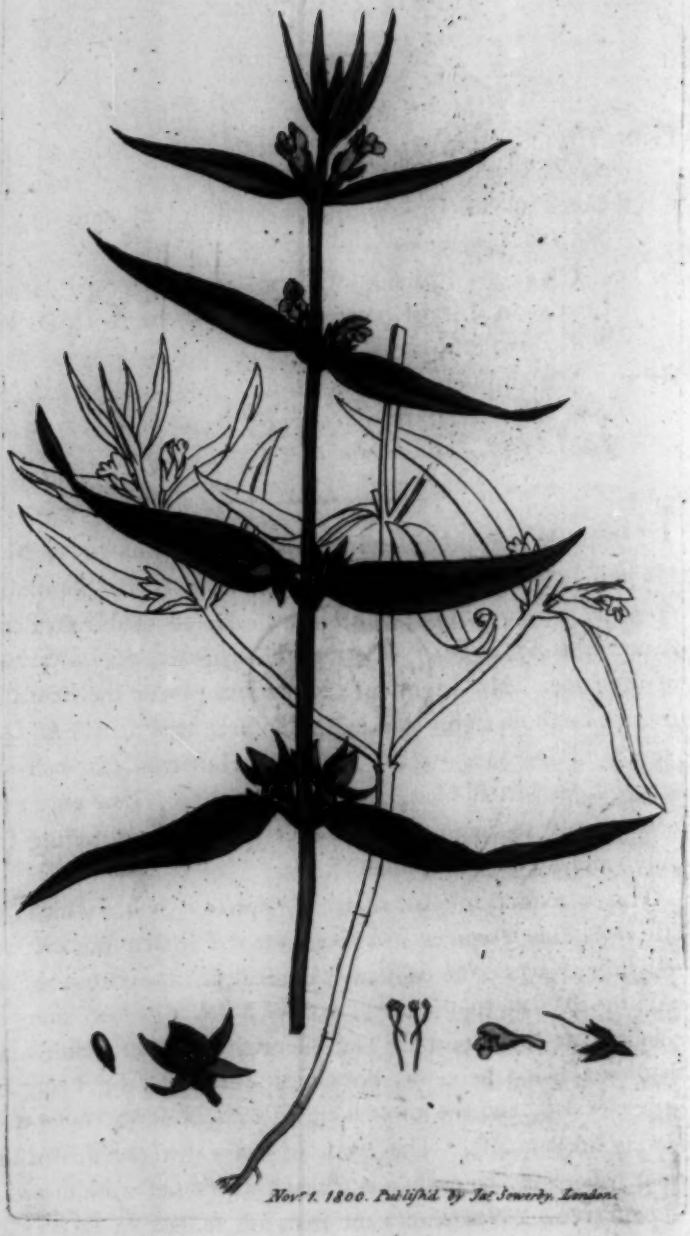
SYN. Stellaria graminea. *Linn. Sp. Pl.* 604. *Sm. Fl. Brit.* 475. *Hudſ.* 190. *With.* 419. *Hull.* 97. *Relh.* 170. *Sibth.* 140. *Abbot.* 96.

Caryophyllus holoſteus arvenſis glaber, flore minore. *Raii Syn.* 346.

THE white ſtarry bloſſoms of this delicate plant prettily beſpangle furze-buſhes, heath, and low broom, on a gravelly or ſandy ſoil; and its herbage being concealed by the buſhes or graſs, and the ſtalks of the panicle very ſlender, the flowers ſeem ſuſpended in the air. They are principally obſervable in June and July.

The root is perennial and creeping. The whole habit of the plant much like that of *S. holoſtea*, figured in our 8th *vol. t.* 511, but its ſize is ſmaller, and the colour a graſs green, not glaucous. The ſtem and flower-ſtalks are perfectly ſmooth. Leaves entire, and ſcarcely even rough at the margin. Panicle divaricated. Calyx-leaves pale, with three acute green ribs, which, as Dr. Stokes obſerves, are not to be found in *S. holoſtea*. Petals about as long as the calyx or longer, very deeply divided. Antheræ of a pale reddiſh hue, pointed out by Ray as a rare circumſtance, and characteriſtic of this ſpecies. It is however alſo obſervable in *S. glauca*, *Fl. Brit.* which Ray originally conſidered as a variety of this, though he afterwards ſeparated them.





Novr 1. 1800. Publishd. by Jas Sowerby, London.

MELAMPYRUM ſylvaticum.

Wood Cow-wheat.

DIDYNAMIA Angioſpermia.

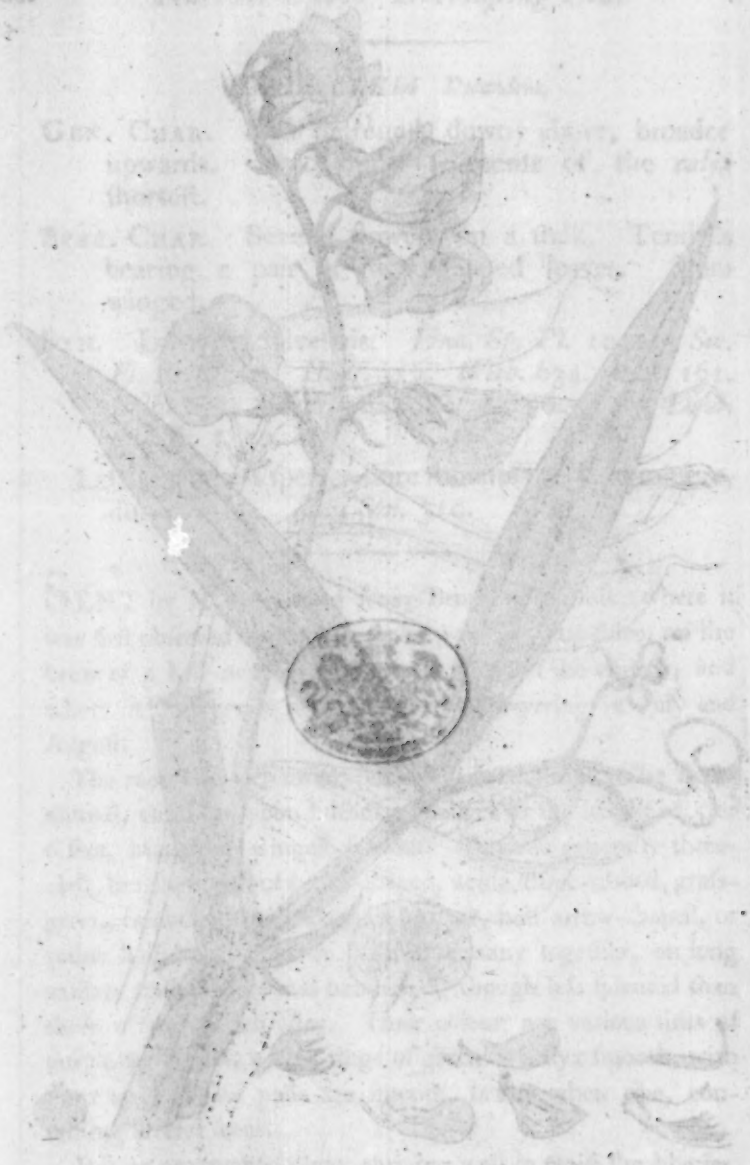
GEN. CHAR. *Cal.* tubular, 4-cleft. Upper lip of the *corolla* compreſſed, turned back at the margin. *Capſ.* 2-celled, oblique, burſting at one edge. *Seeds* 2, gibbous.

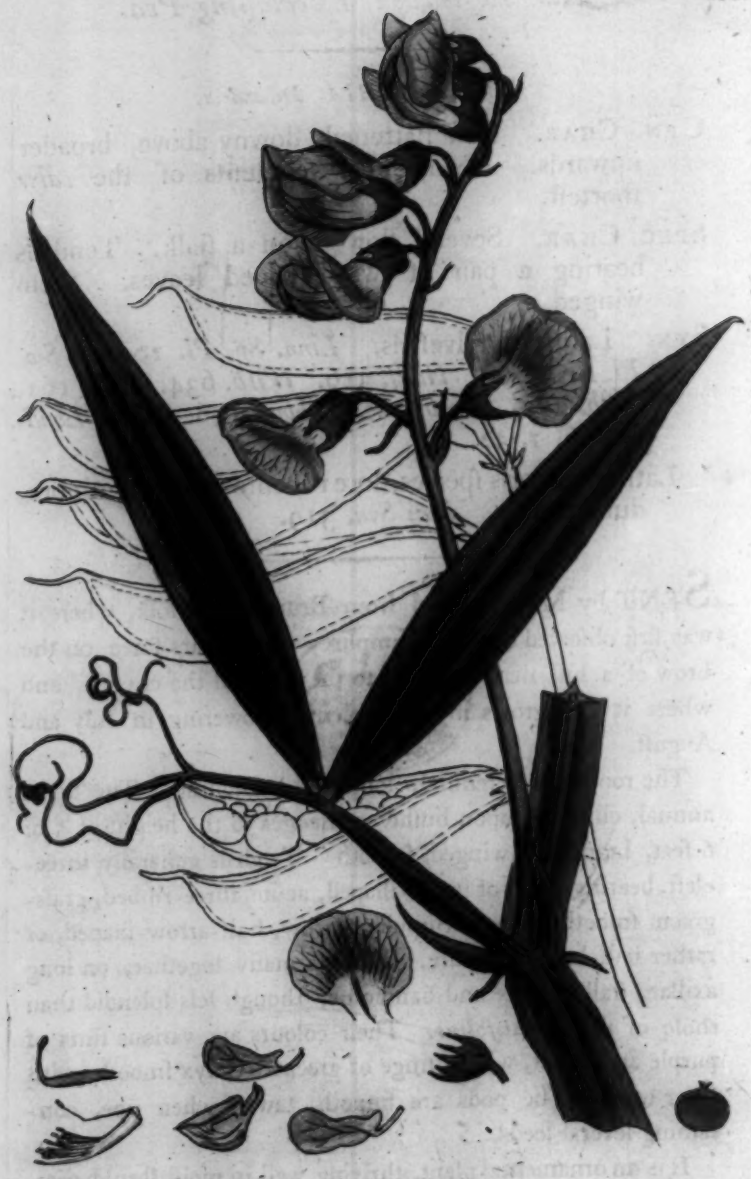
SPEC. CHAR. Flowers lateral, leaning one way. Leaves in diſtant pairs. Corolla open, with its lip bent downwards.

SYN. Melampyrum ſylvaticum. *Linn. Sp. Pl.* 843. *Sm. Fl. Brit.* 653. *Lightf.* 325. *With.* 546. *Hull.* 137. *Fl. Dan. t.* 145.

IT appears that this *Melampyrum* was not known to Mr. Hudſon. What he called *M. ſylvaticum* is the common *pratenſe*, ſee our *t.* 113; and his *pratenſe*, adopted from Ray, is undoubtedly, as Dr. Withering firſt ſuggeſted, only a variety of the ſame. Mr. Lightfoot's herbarium proves the Scottiſh *ſylvaticum* to be right, and our wild ſpecimens ſent from the county of Durham by the Rev. Mr. Harriman, as well as others from Mr. Robſon, are the real plant of Linnæus. It occurs only in mountainous woods or foreſts, flowering in July, and the root is annual.

This is rather ſmaller than *M. pratenſe*, with which it otherwiſe much agrees in appearance. The ſtem however is roughiſh; leaves more conſtantly undivided; flowers but about half the ſize of that ſpecies, and of a fuller yellow, orange coloured at the mouth. The eſſential character conſiſts in that part being pervious, not cloſed, the upper lip being a little elevated, and the lower hanging ſtraight down, not projecting horizontally. The teeth of the calyx are dilated at their baſe, and the capſule is marked with a net-work of prominent veins. Sometimes the ſeeds are ſolitary in each cell, though moſt frequently in pairs.





LATHYRUS ſylveſtris.

Narrow-leaved Everlaſting Pea.

DIADELPHIA Decandria.

GEN. CHAR. *Style* flattened, downy above, broader upwards. Two upper ſegments of the *calyx* ſhorteſt.

SPEC. CHAR. Several flowers on a ſtalk. Tendrils bearing a pair of ſword-ſhaped leaves. Stem winged.

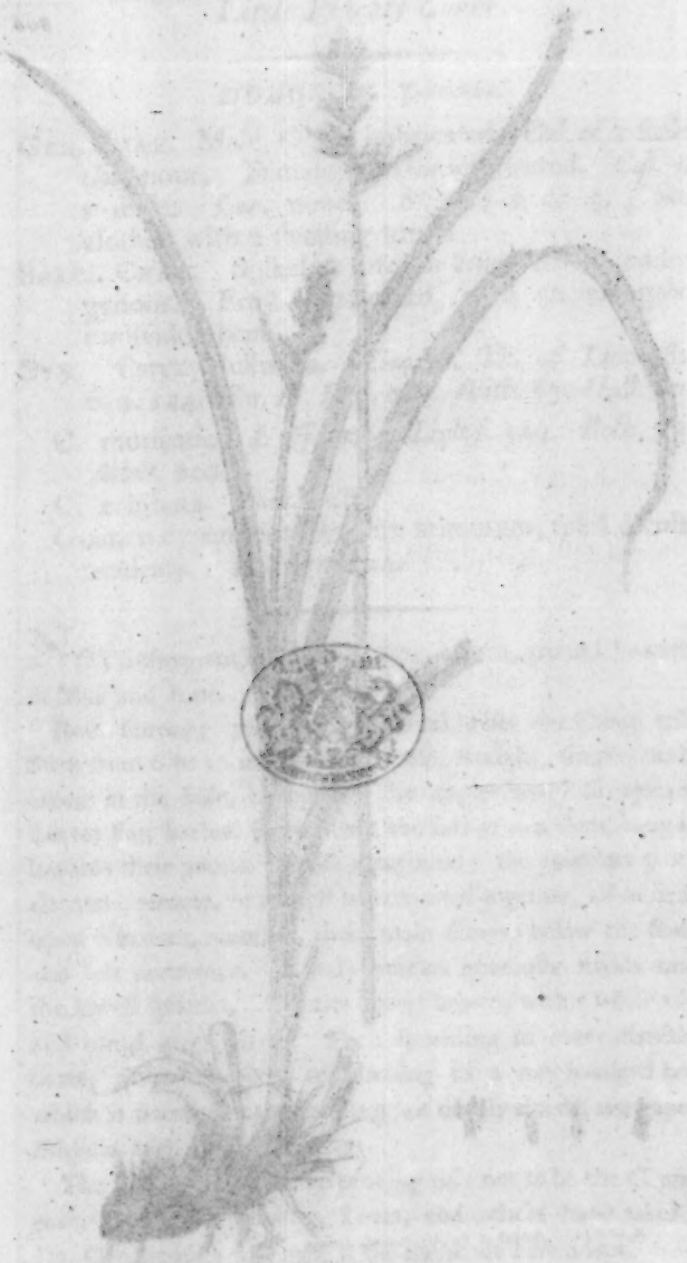
SYN. Lathyrus ſylveſtris. *Linn. Sp. Pl.* 1033. *Sm. Fl. Brit.* 765. *Hudſ.* 316. *With.* 634. *Hull.* 161. *Relh.* 272. *Sibth.* 222. *Abbot.* 156. *Curt. Lond. faſc.* 6. *t.* 52.

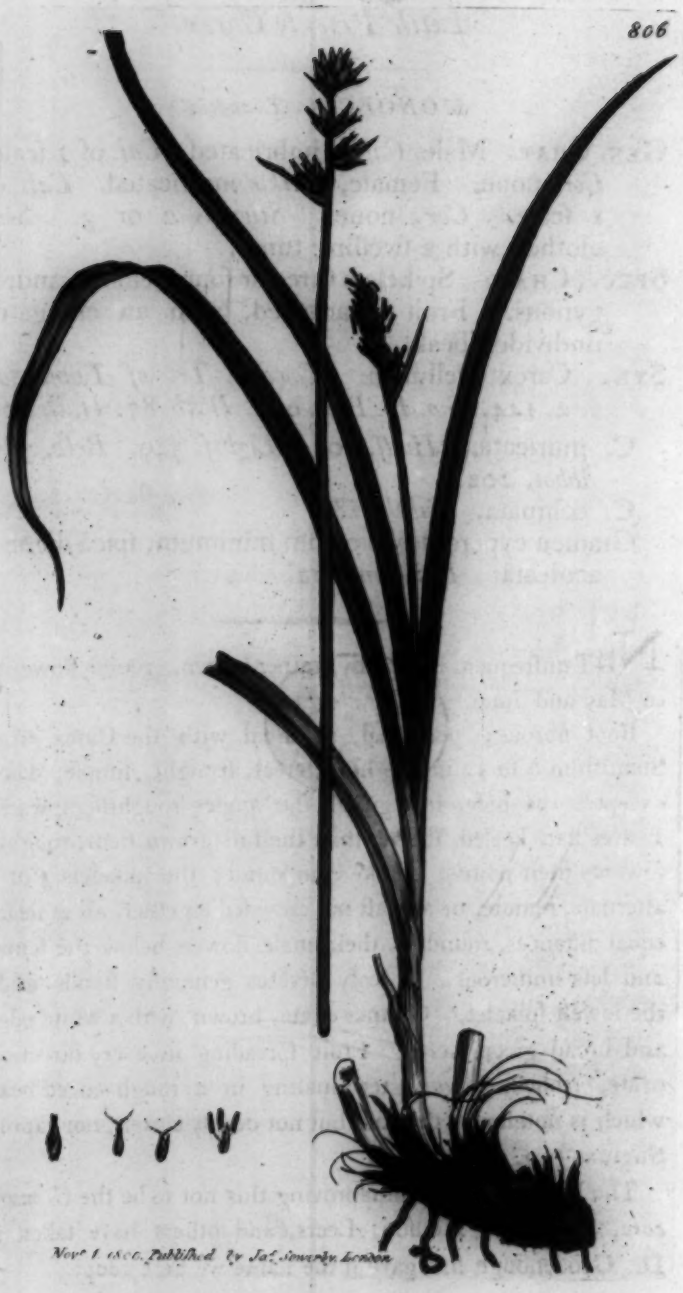
Lathyri majoris ſpecies, flore rubente et albido minore, dumetorum. *Raii Syn.* 319.

SENT by Mr. Pitchford from Brundle, Norfolk, where it was firſt obſerved by Mr. Humphrey many years ſince, on the brow of a hill near a ſpring to the ſouth of the church, and where it ſtill grows in great plenty, flowering in July and Auguſt.

The roots are perennial, long and branching. The ſtems annual, climbing upon buſhes or hedges to the height of 5 or 6 feet, branched, winged, ſmooth. Tendrils generally three-cleft, bearing a pair of ſword-ſhaped, acute, three-ribbed, graſs-green, ſmooth leaves. Stipulæ narrow, half-arrow-ſhaped, or rather half-haſtate, entire. Flowers many together, on long axillary ſtalks, large and handſome, though leſs ſplendid than thoſe of the *L. latifolius*. Their colours are various tints of purple and violet, with a tinge of green. Calyx ſmooth, with taper teeth. The pods are ſmooth, tawny when ripe, containing ſeveral ſeeds.

It is an ornamental plant, thriving well in moiſt ſhrubberies, but too apt to choak and overwhelm the buſhes that afford it ſupport.





Nov.r 1 1800. Published by Jas. Sowerby London

CAREX ſtellulata.

Little Prickly Carex.

MONOECIA Triandria.

GEN. CHAR. Male, *Catkin* imbricated. *Cal.* of 1 ſcale. *Cor.* none. Female, *Catkin* imbricated. *Cal.* of 1 ſcale. *Cor.* none. *Stigmas* 2 or 3. *Seed* clothed with a ſwelling tunic.

SPEC. CHAR. Spikelets three or four, remote, androgynous. Fruit divaricated, with an elongated undivided beak.

SYN. Carex ſtellulata. *Gooden. Tr. of Linn. Soc. v.* 2. 144. *Sm. Fl. Brit.* 966. *With.* 87. *Hull.* 204.

C. muricata. *Hudſ.* 406. *Lightf.* 549. *Relh.* 350. *Abbot.* 202.

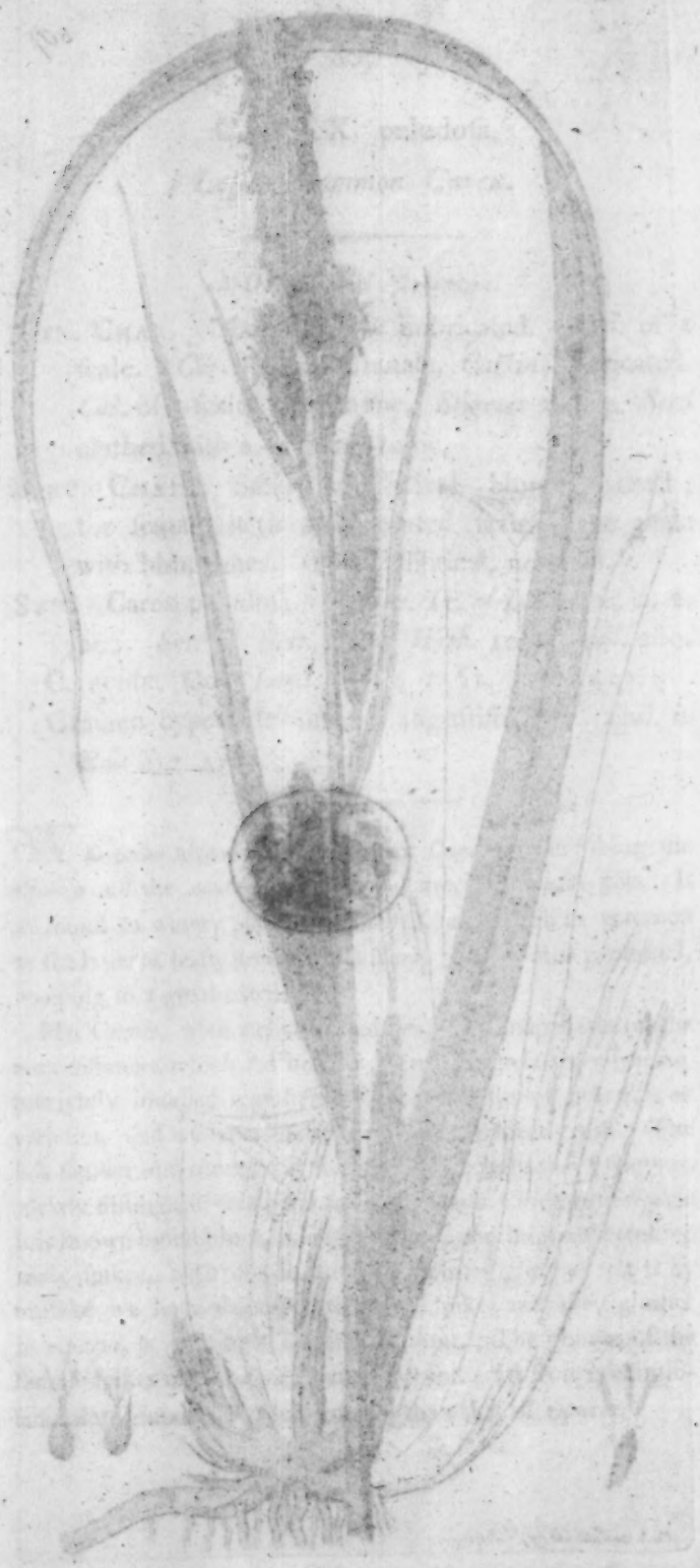
C. echinata. *Sibth.* 28.

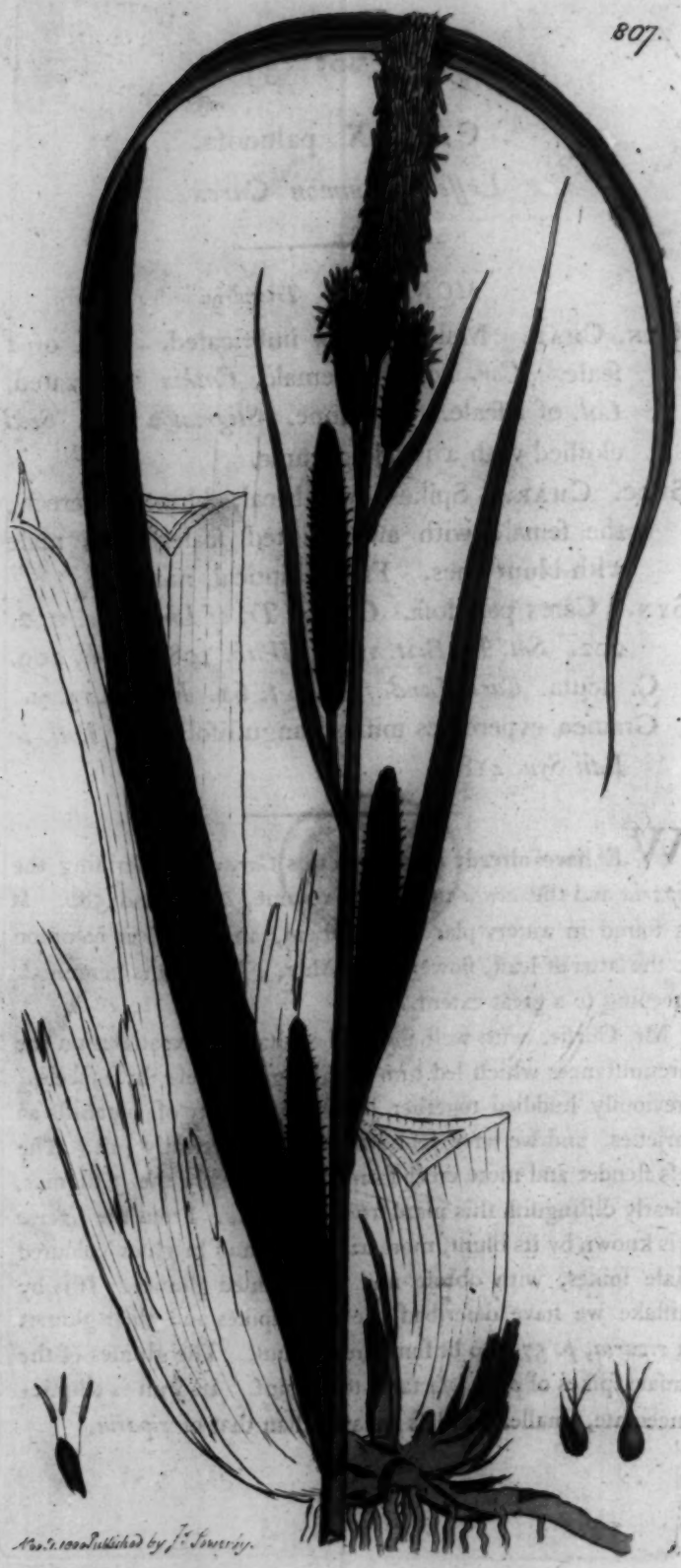
Gramen cyperoides ſpicatum minimum, ſpicâ divulsâ, aculeatâ. *Raii Syn.* 424.

NOT unfrequent in marſhy, rather barren, ground, flowering in May and June.

Root fibrous; perennial, as uſual with the Carex tribe. Stem from 6 to 12 inches high, erect, ſtraight, ſimple, naked except at the baſe, triangular, the angles roughiſh upwards. Leaves flat, keeled, ſhorter than the full-grown ſtem, roughiſh towards their points. Spike compound; the ſpikelets 3 or 4, alternate, remote, or at leaſt not crowded together, all at nearly equal diſtances, roundiſh, their male flowers below the female and leſs numerous. A leafy bractea generally ſtands under the loweſt ſpikelet. Glumes ovate, brown, with a white edge, and broad green nerve. Fruit ſpreading in every direction, ovate, ribbed, brown, terminating in a rough-edged beak, which is notched at the end, but not deeply cloven, nor gaping. Stigmas two.

The Linnæan herbarium proving this not to be the *C. muricata*, for which Hudſon, Leers, and others have taken it, Dr. Goodenough firſt gave it the name we here adopt.





Mar. 1. 1809. Published by J.t Sowerby.

CAREX paludoſa.

Leſſer Common Carex.

MONOECIA Triandria.

GEN. CHAR. Male, *Catkin* imbricated. *Cal.* of 1 ſcale. *Cor.* none. Female, *Catkin* imbricated. *Cal.* of 1 ſcale. *Cor.* none. *Stigmas* 2 or 3. *Seed* clothed with a ſwelling tunic.

SPEC. CHAR. Spikes cylindrical, bluntiſh, erect; the female with awn-pointed ſcales; the male with blunt ones. Fruit elliptical, notched.

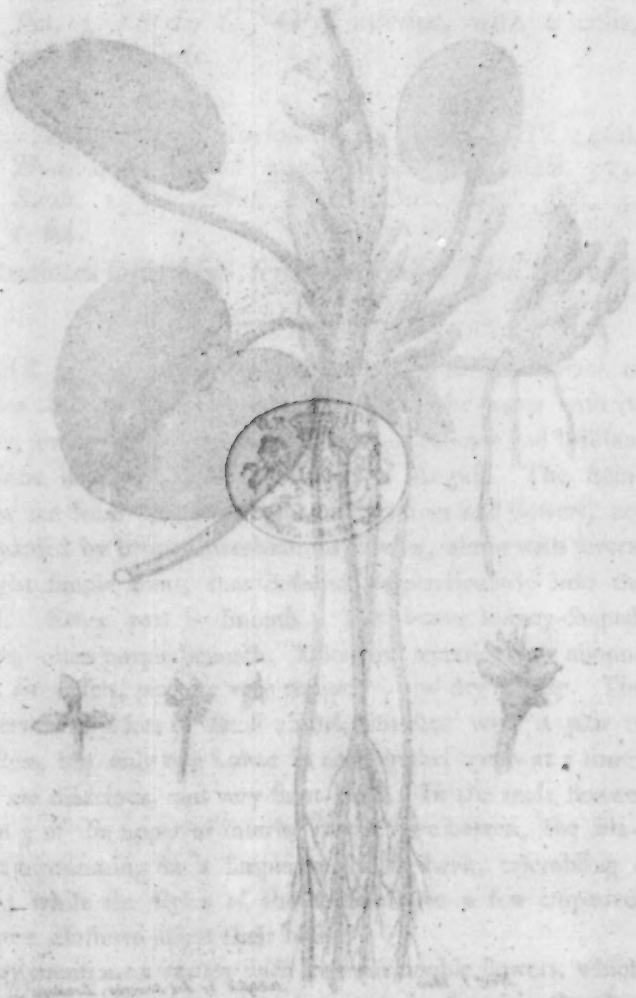
SYN. Carex paludoſa. *Gooden. Tr. of Linn. Soc. v.* 2. 202. *Sm. Fl. Brit.* 1002. *With.* 108. *Hull.* 209.

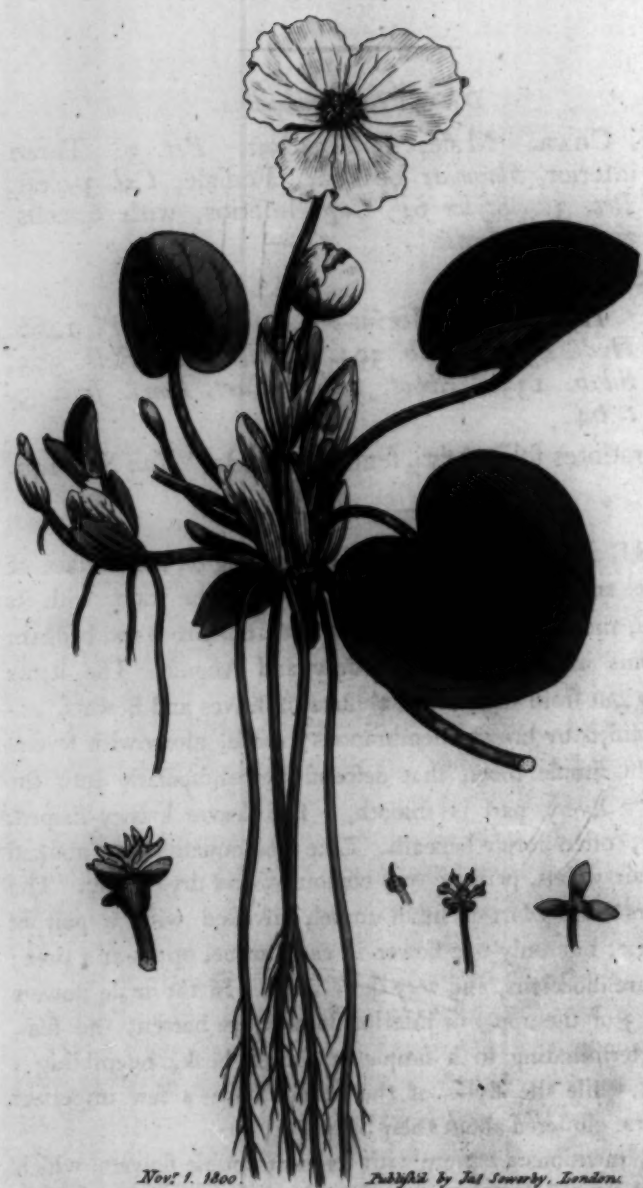
C. acuta. *Curt. Lond. faſc.* 4. *t.* 61. *Hudſ.* 413, γ.

Gramen cyperoides minus, anguſtifolium. *Dill. in Raii Syn.* 418.

WE have already alluded to this *Carex* in deſcribing the *riparia* and the *acuta* in our 9th volume, *t.* 579 and 580. It is found in watery places, like them, and is full as common as the latter at leaſt, flowering in May. The root is perennial, creeping to a great extent.

Mr. Curtis, with well-founded exultation, expatiates on the circumſtances which led him to diſtinguiſh theſe three ſpecies, previouſly huddled together by the generality of botaniſts as varieties, and we have found his remarks perfectly juſt. The leſs ſlender and more erect form, but eſpecially the 3 ſtigmas, clearly diſtinguiſh this plant from the *acuta*. From the *riparia* it is known by its blunt, more triangular, and brighter-coloured male ſpikes, with obtuſe and not pointed glumes. It is by miſtake we have deſcribed the male ſpikes and their glumes in *riparia*, *p.* 579, to be ſometimes blunt. The glumes of the female ſpikes of *paludoſa* taper to a point. Its fruit is elliptic-lanceolate, ſmaller and leſs inflated than that of *riparia*.





Nov.r 1. 1800. Published by Jas Sowerby, London.

HYDROCHARIS Morſus-ranæ.

Common Frog-bit.

DIOECIA Enneandria.

GEN. CHAR. Male, *Cal.* 3-cleft. *Pet.* 3. Three interior *filaments* beaked. Female, *Cal.* 3-cleft. *Pet.* 3. *Styles* 6. *Capſ.* inferior, with 6 cells, and many *ſeeds*.

SPEC. CHAR. . . . .

SYN. Hydrocharis Morſus-ranæ. *Linn. Sp. Pl.* 1466. *Hudſ.* 436. *With.* 394. *Hull.* 222. *Relh.* 373. *Sibth.* 135. *Abbot.* 216. *Curt. Lond. faſc.* 3. *t.* 64.

Stratiotes foliis Aſari, ſemine rotundo. *Raii Syn.* 290.

THE *Hydrocharis* is perennial, floating on the ſurface of ditches and ſlow ſtreams, almoſt covering the water with its leaves, and agreeably enlivening it with its delicate and brilliant bloſſoms in the months of July and Auguſt. The ſtems throw out from their joints cluſters of leaves and flowers, accompanied by brown membranous ſtipulæ, along with ſeveral ſtraight ſimple roots, that deſcend perpendicularly into the mud. Every part is ſmooth. The leaves kidney-ſhaped, entire, often purple beneath. Like moſt aquatics they abound with air-veſſels, perſpire very copiouſly, and dry rapidly. The flowers form a ſort of ſmall umbel, inveſted with a pair of bracteæ, but only one flower in each umbel opens at a time; they are dioecious, and very ſhort-lived. In the male flowers about 3 of the upper or interior ſtamina are barren, the filament terminating in a ſimple or forked beak, reſembling a ſtyle; while the ſtyles of the female have a few imperfect antheræ cluſtered about their baſe.

Ray mentions a variety with fragrant double flowers, which Mr. Relhan informs us is not now to be found in the place he indicates. Flowers with 6 petals now and then occur.

LICHEN, lynceus.

Speckled Lichen.

Oct. 1. 1800. Published by Jas Sowerby, London.

LICHEN lynceus.

Speckled Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, ſcattered warts.

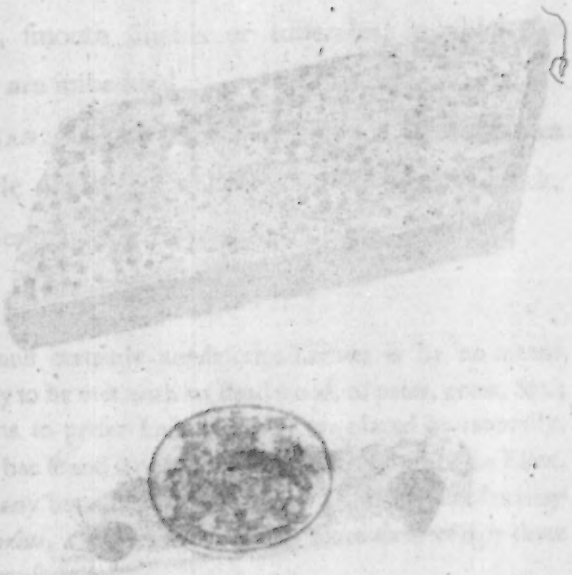
Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

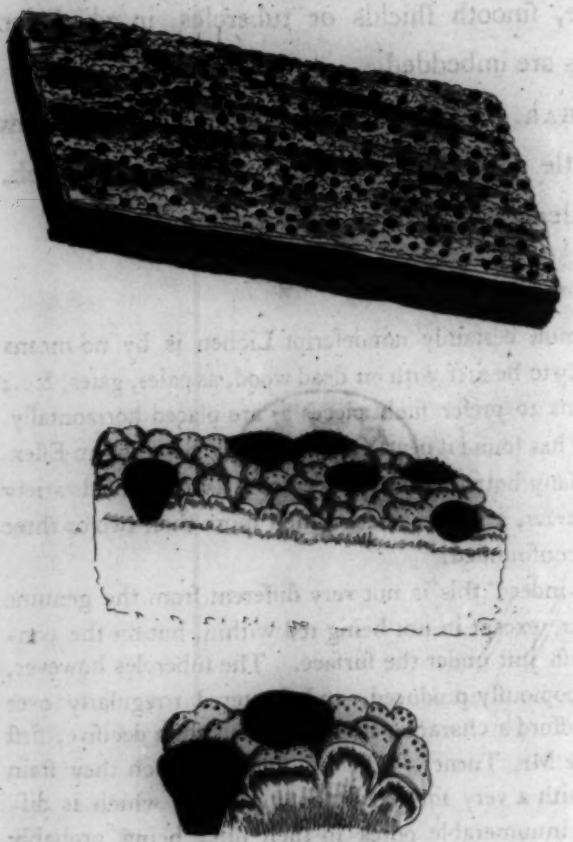
SPEC. CHAR. Cruſt white, ſmooth, uniform. Tubercles numerous, depreſſed, oblong, curved, rounded at each end, gray, with a black entire edge.

MR. SOWERBY diſcovered this Lichen about 5 years ſince, in Hainault foreſt, Eſſex, where it often covers the rugged bark of old oaks almoſt entirely. Mr. D. Turner has ſince obſerved it on an oak near Windſor. We have not met with any figure or deſcription to which this plant can be referred. The plates of Wulfen's and Hoffmann's *albo-cæruleſcens* at firſt ſight ſeem to accord with it, but on accurate examination will be found widely different.

Its cruſt is very white, ſmooth, and uniform, ſcarcely a hair's breadth in thickneſs, cloſely applied to the bark, and conforming to all its ſinuoſities and protuberances. Tubercles exceedingly numerous, ſmall, thick-ſet, regularly ſpread over the cruſt, in which they are partly immerſed. Their form is various, but generally oblong, curved, rounded at each end, often kidney-ſhaped; their ſurface flat or depreſſed, grayiſh, with a narrow, black, ſcarcely prominent, margin. In time their whole ſurface becomes black, and then the margin is no longer perceptible.

This ſpecies ſhould be placed near *L. ſcriptus* and *rugoſus*, from both which it is however quite diſtinct. Its tubercles are never branched, nor do they ever terminate in acute points; by which they may be known even in a young ſtate, when they are longitudinally furrowed like the *ſcriptus*.





Oct 1. 1800. Published by Jas Sowerby, London.

LICHEN inquinans.

Sooty-knobbed Lichen.

CRYPTOGAMIA Algæ.

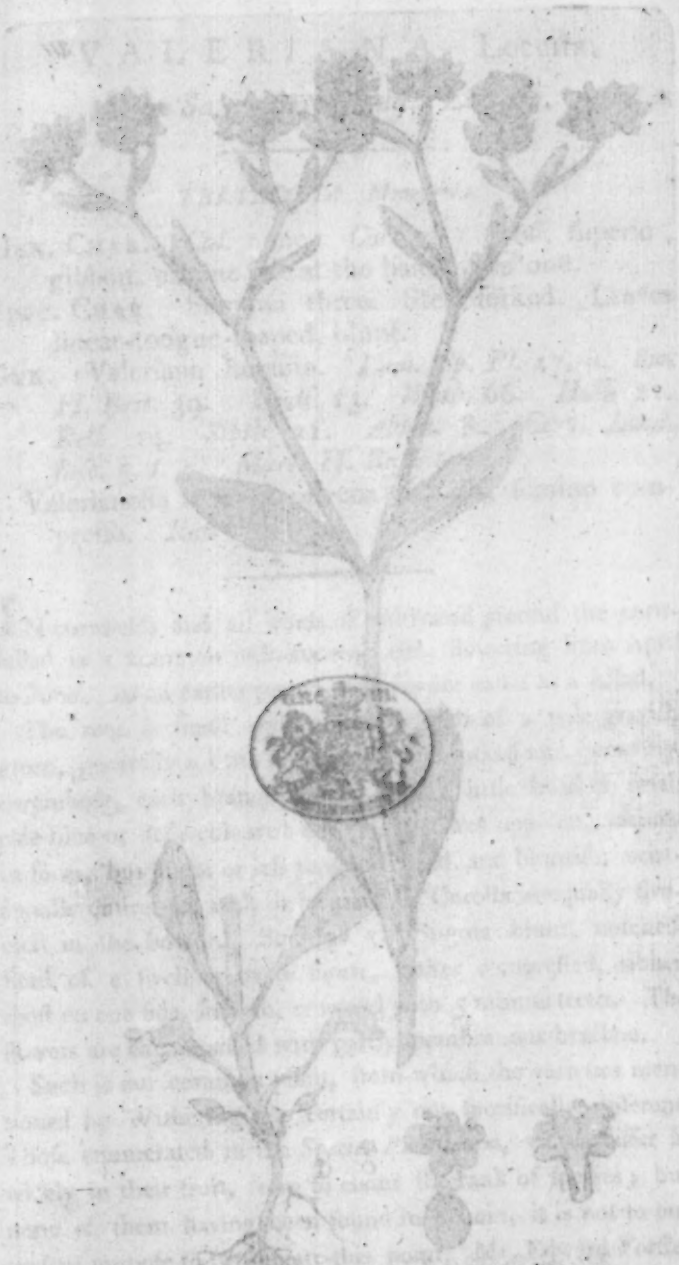
GEN. CHAR. Male, ſcattered warts.

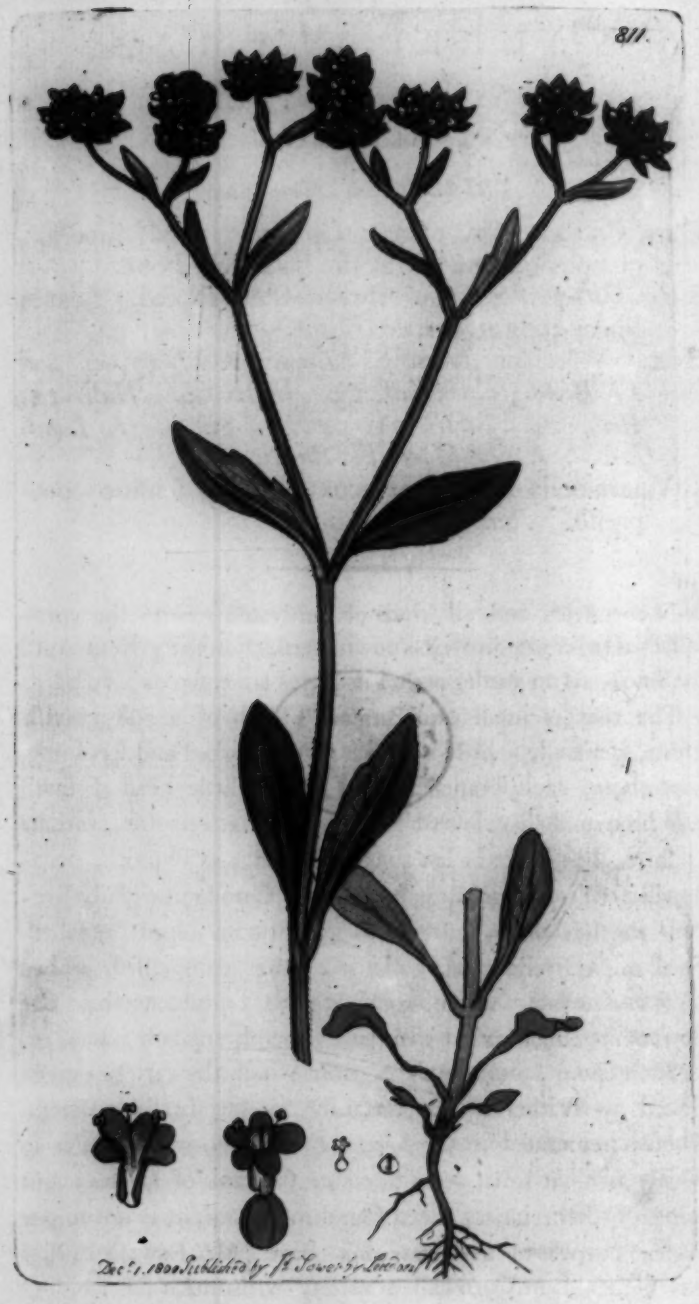
Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

SPEC. CHAR. Cruſt white, granulated. Tubercles a little prominent, round, flattiſh, grayiſh-black, powdery, with a ſmooth black edge.

THIS moſt certainly nondeſcript Lichen is by no means unfrequently to be met with on dead wood, as pales, gates, &c.; but it ſeems to prefer ſuch pieces as are placed horizontally. Mr. Turner has found it near Yarmouth, Mr. Sowerby in Eſſex. Probably many botaniſts have neglected it as a ſuppoſed variety of *ſanguinarius*, a ſpecies under which more than two or three have been confounded.

In cruſt indeed this is not very different from the genuine *ſanguinarius*, except in not being red within, but on the contrary greeniſh juſt under the ſurface. The tubercles however, which are copiouſly produced, and ſcattered irregularly over the cruſt, afford a character no leſs obvious than deciſive, firſt obſerved by Mr. Turner. On the ſlighteſt touch they ſtain the finger with a very fine black ſooty powder, which is diſcharged by innumerable pores in their diſk, being probably the ſeed. This diſtinguiſhes it from every other cruſtaceous Lichen with which we are acquainted. The *ſphærocephalus* indeed, *v.* 6. *t.* 414, has tubercles that produce a powder mixed with fibres, and thoſe tubercles ſtand on long ſtalks, to which ours even in that reſpect betrays an affinity when its tubercles are diſſected from the cruſt.





Dec.r 1. 1800. Published by J.t Sowerby, London.

VALERIANA Locuſta.

Corn Sallad, or Lamb's Lettuce.

TRIANDRIA Monogynia.

GEN. CHAR. *Cal.* none. *Cor.* of 1 petal, ſuperior, gibbous on one ſide at the baſe. *Seed* one.

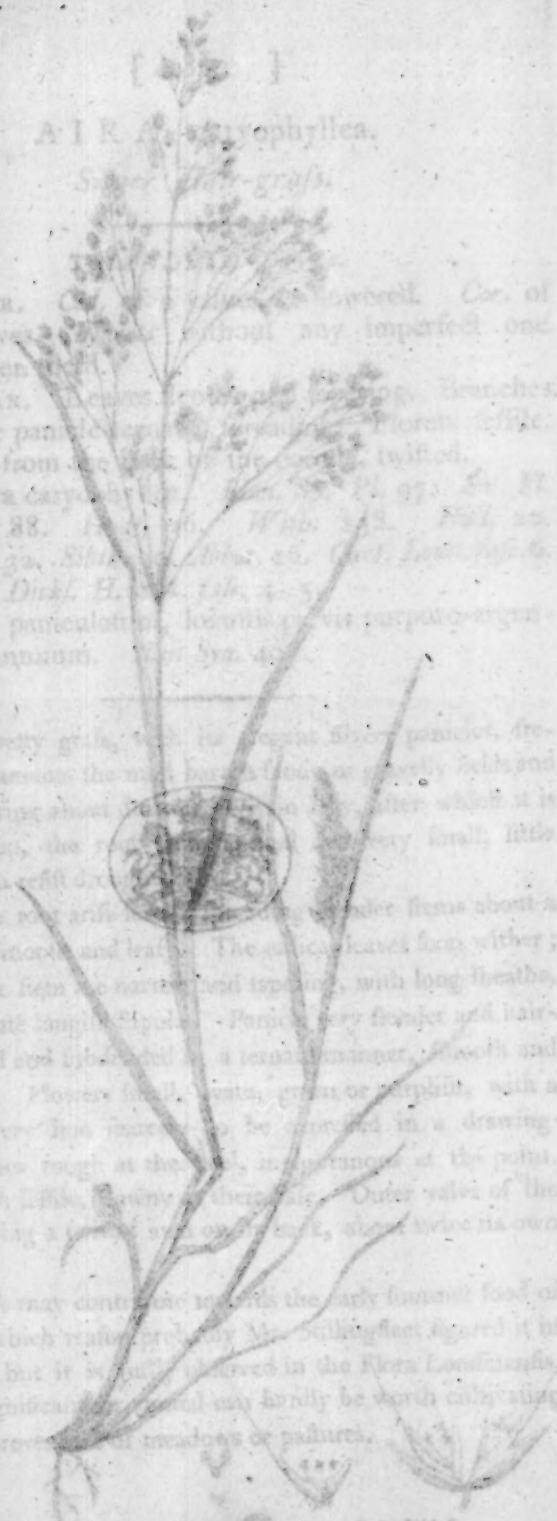
SPEC. CHAR. Stamina three. Stem forked. Leaves linear-tongue-ſhaped, blunt.

SYN. Valeriana Locuſta. *Linn. Sp. Pl.* 47, α. *Sm. Fl. Brit.* 39. *Hudſ.* 13. *With.* 66. *Hull.* 11. *Relh.* 14. *Sibth.* 21. *Abbot.* 8. *Curt. Lond. faſc.* 5. *t.* 4. *Mart. Fl. Ruſt. t.* 24.
Valerianella arvenſis præcox humilis, ſcmine compreſſo. *Raii Syn.* 201.

IN cornfields and all kinds of cultivated ground the cornſallad is a common well-known weed, flowering from April to June. At an earlier period its leaves are eaten as a ſallad.

The root is ſmall and annual. Herb of a pale grayiſh green, generally a little downy. Stem forked and ſpreading, corymboſe, each branch topped with a little head of ſmall pale blue or fleſh-coloured flowers. Leaves oppoſite, various in form, but more or leſs tongue-ſhaped and bluntiſh, occaſionally entire, ſerrated, or laciniated. Corolla unequally five-cleft in the border. Stamina 3. Stigma blunt, notched. Seed of a ſwelling ovate figure, rather compreſſed, ribbed moſt on one ſide, ſmooth, crowned with 5 minute teeth. The flowers are encompaſſed with partly membranous bracteæ.

Such is our common plant, from which the varieties mentioned by Withering are certainly not ſpecifically different. Thoſe enumerated in the *Species Plantarum*, which differ ſo widely in their fruit, ſeem to claim the rank of ſpecies; but none of them having been found in Britain, it is not to our preſent purpoſe to inveſtigate this point. Mr. Edward Forſter has gathered in Cornwall a variety with much leſs ſwelling ſeeds than that now before us, which we recommend to the ſtudy of Corniſh botaniſts.



Published Dec.r 1. 1800. by Jas. Sowerby, London.

AIRA caryophyllea.

Silver Hair-graſs.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 2 valves, 2-flowered. *Cor.* of 2 valves. *Florets* without any imperfect one between them.

SPEC. CHAR. Leaves ſlender and tapering. Branches of the panicle ternate, ſpreading. Florets ſeſſile. Awn from the back of the corolla, twiſted.

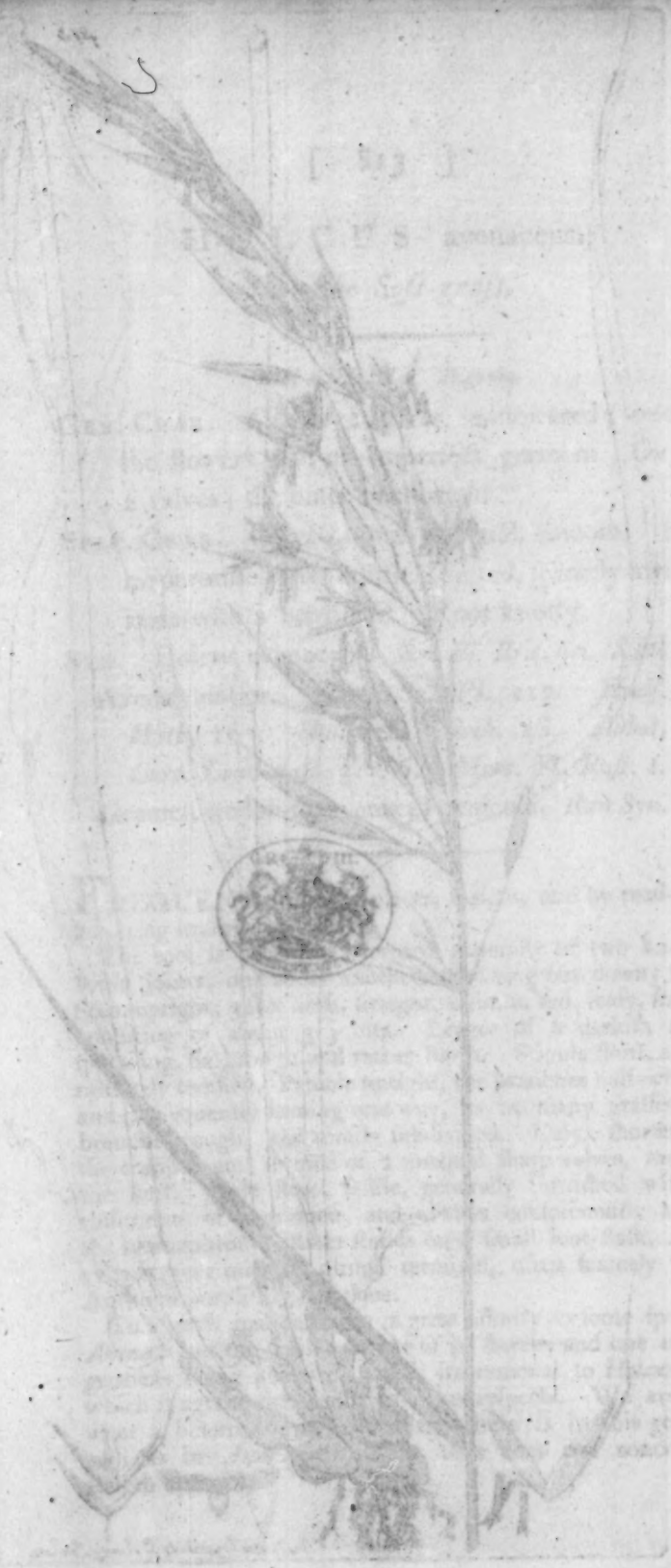
SYN. Aira caryophyllea. *Linn. Sp. Pl.* 97. *Sm. Fl. Brit.* 88. *Hudſ.* 36. *With.* 138. *Hull.* 20. *Relh.* 32. *Sibth.* 39. *Abbot.* 16. *Curt. Lond. faſc.* 6. *t.* 6. *Dickſ. H. Sicc. faſc.* 4. 5.

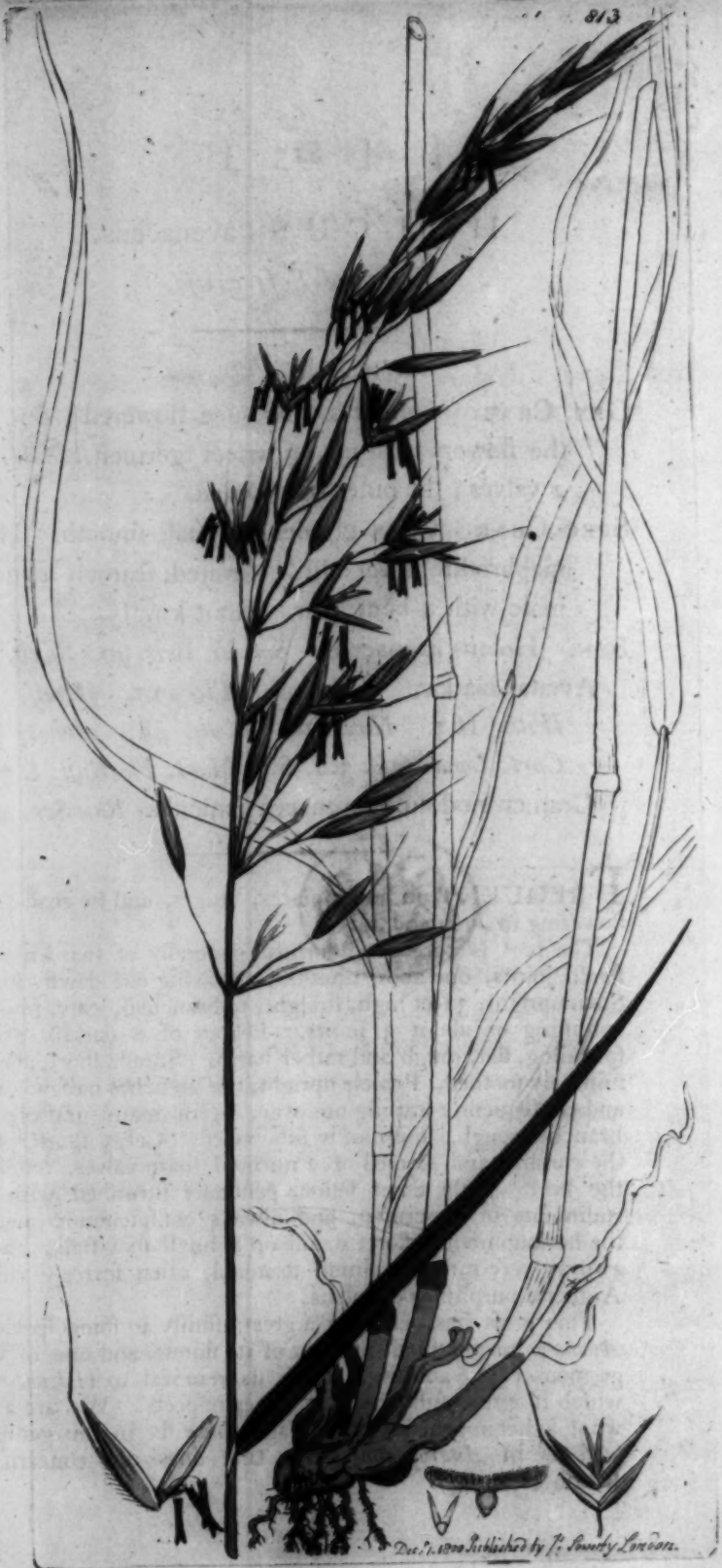
Gramen paniculatum, locuſtis parvis purpuro-argenteis, annuum. *Raii Syn.* 407.

THIS pretty graſs, with its elegant ſilvery panicles, frequently ornaments the moſt barren ſandy or gravelly fields and hills, flowering about June or early in July, after which it is ſoon dried up, the root being annual and very ſmall, little calculated to reſiſt drought.

From one root ariſe ſeveral ſpreading ſlender ſtems about a ſpan high, ſmooth and leafy. The radical leaves ſoon wither; thoſe on the ſtem are narrow and tapering, with long ſheaths, and lanceolate longiſh ſtipulæ. Panicle very ſlender and hair-like, divided and ſubdivided in a ternate manner, ſmooth and divaricated. Flowers ſmall, ovate, green or purpliſh, with a ſhining ſilvery hue ſcarcely to be expreſſed in a drawing. Calyx-glumes rough at the keel, membranous at the point. Florets both ſeſſile, downy at their baſe. Outer valve of the corolla bearing a twiſted awn on its back, about twice its own length.

This graſs may contribute towards the early ſummer food of ſheep, for which reaſon probably Mr. Stillingfleet figured it in his work; but it is juſtly obſerved in the Flora Londinenſis, that ſo inſignificant an annual can hardly be worth cultivating for the improvement of meadows or paſtures.





Dec.1.1800 Published by J.Sowerby London.

HOLCUS avenaceus.

Oat-like Soft-graſs.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 2 valves, 2-flowered; one of the flowers with an imperfect germen. *Cor.* of 2 valves; the outer one awned.

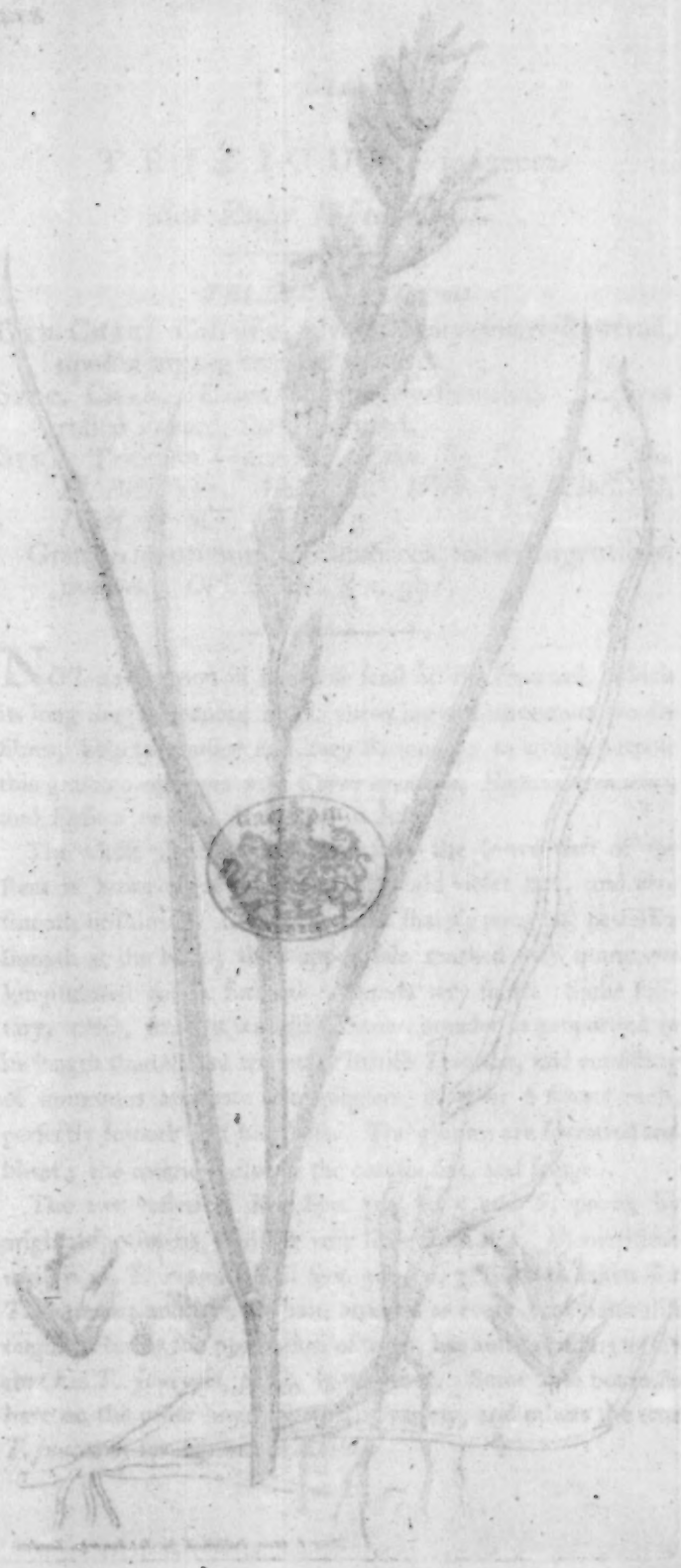
SPEC. CHAR. Calyx-glumes unequal, ſmooth. Hermaphrodite floret a little elevated, ſcarcely awned: male with a bent awn. Root knotty.

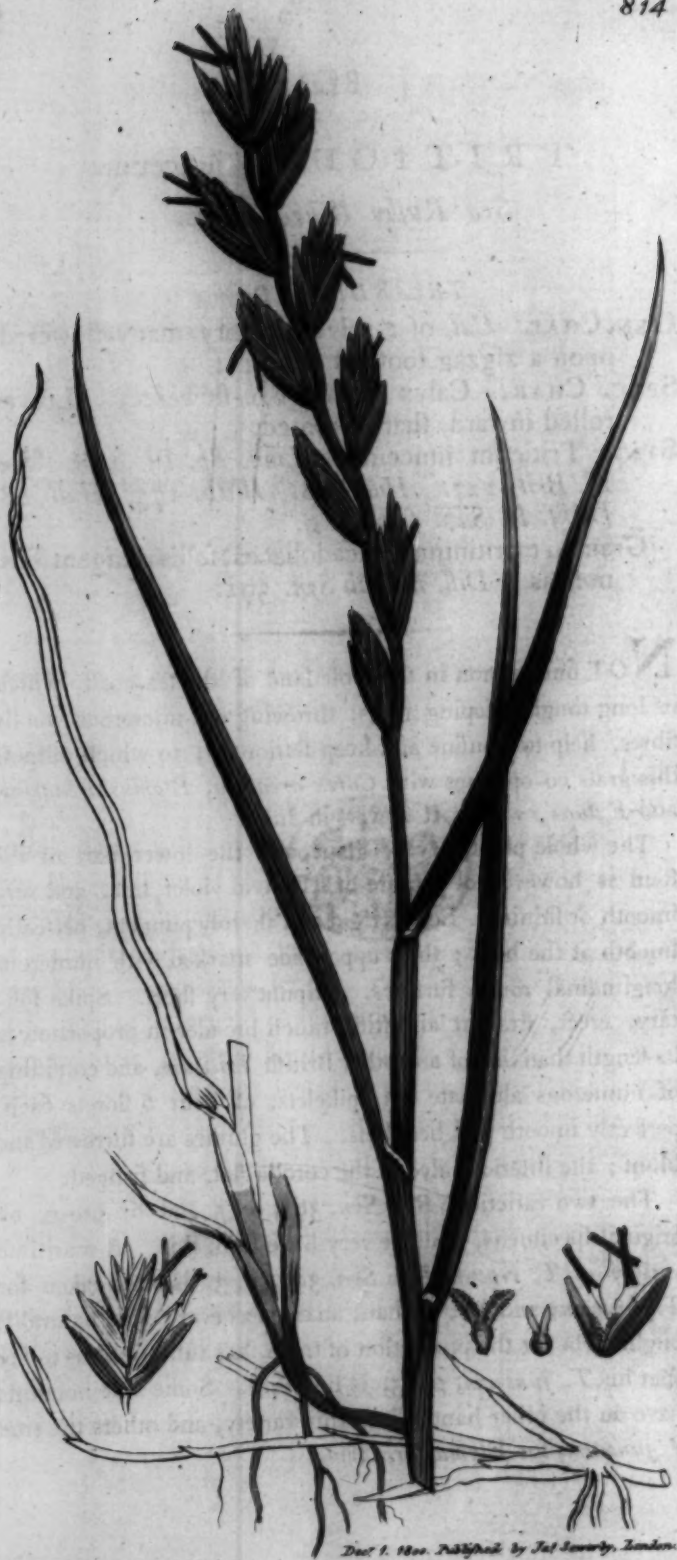
SYN. Holcus avenaceus. *Sm. Fl. Brit.* 90. *Sibth.* 40.
Avena elatior. *Linn. Sp. Pl.* 117. *Hudſ.* 53. *With.* 163. *Hull.* 26. *Relh.* 48. *Abbot.* 25. *Curt. Lond. faſc.* 3. *t.* 6. *Mart. Fl. Ruſt. t.* 7.
Gramen nodoſum, avenaceâ paniculâ. *Raii Syn.* 406.

FREQUENT in buſhy places, hedges, and by road-ſides, flowering in June and July.

The root is perennial, formed generally of two knots or ſwoln joints, one above another, throwing out downy fibres. Stem upright, 3 feet high, ſtraight, unbranched, leafy, ſmooth, conſiſting of about 3 joints. Leaves of a darkiſh green, ſpreading, flat, rough and rather harſh. Stipula ſhort, abrupt, minutely toothed. Panicle upright, the branches half-whorled, and conſequently leaning one way, as in many graſſes; the branches rough, and moſtly ſubdivided. Calyx ſhorter than the corolla, and formed of 2 unequal ſharp valves, rough on the keel. Male floret ſeſſile, generally furniſhed with the rudiments of a germen, and always conſpicuouſly awned; the hermaphrodite floret ſtands on a ſmall foot-ſtalk, and its awn is very minute, almoſt terminal, often ſcarcely viſible. Antheræ purpliſh, pendulous.

This graſs has certainly a great affinity to ſome ſpecies of *Avena*; but the ſmall number of its florets, and one of their germens being abortive, juſtify its removal to *Holcus*, with which it agrees ſufficiently in other reſpects. We are aware what a heterogeneous aſſemblage there is in this genus (as well as in *Andropogon*), but that does not concern the Britiſh botaniſt.





Dec. 1. 1800. Published by Jas Sowerby, London.

TRITICUM junceum.

Sea Ruſhy Wheat-graſs.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 2 valves, ſolitary, many-flowered, upon a zigzag toothed *rachis*.

SPEC. CHAR. Calyx blunt, five-flowered. Leaves rolled inward, ſharp-pointed.

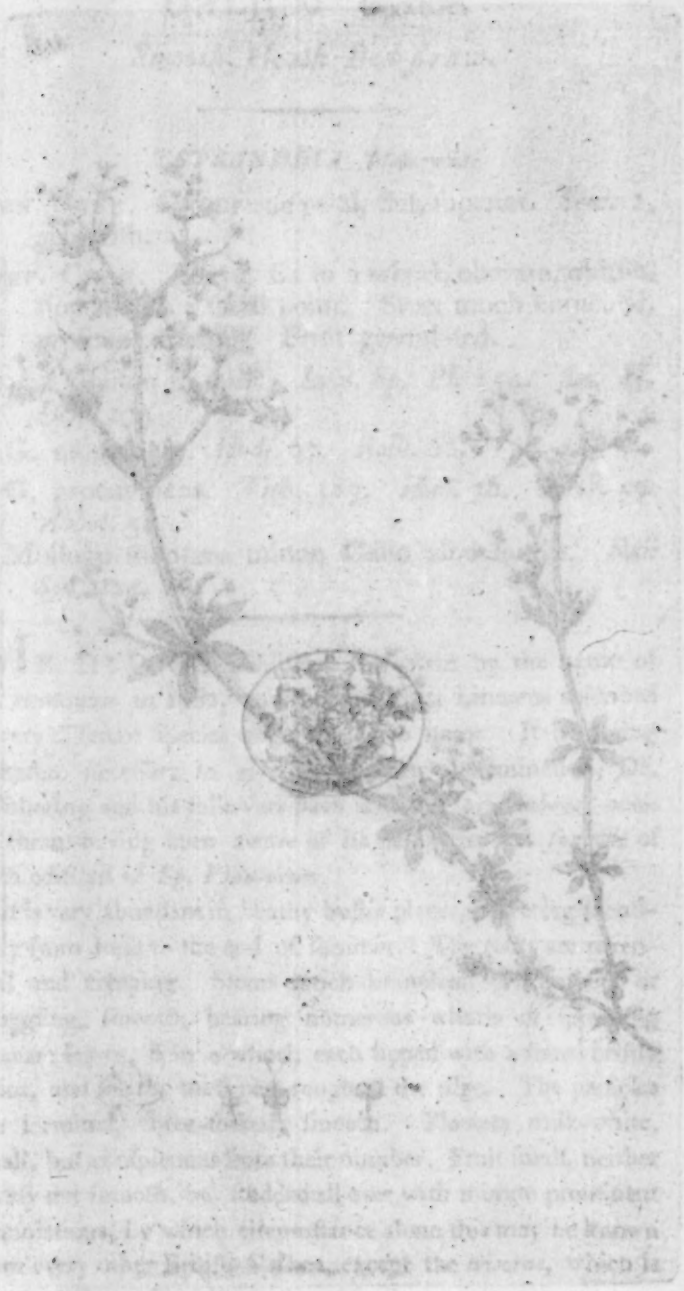
SYN. Triticum junceum. *Linn. Sp. Pl.* 128. *Sm. Fl. Brit.* 127. *Hudſ.* 58. *With.* 173. *Hull.* 28. *Dickſ. H. Sicc. faſc.* 6. 9.

Gramen maritimum, ſpicâ loliaceâ, foliis pungentibus, noſtras. *Dill. in Raii Syn.* 391.

NOT uncommon in the looſe ſand of the ſea-coaſt, which its long tough creeping roots, throwing out numerous woolly fibres, help to confine and keep ſtationary; to which purpoſe this graſs co-operates with *Carex arenaria*, *Elymus arenarius*, and *Feſtuca rubra*. It flowers in July.

The whole plant is very glaucous; the lower part of the ſtem is however of a more or leſs vivid violet hue, and very ſmooth or ſhining. Leaves rigid and ſharply pungent, perfectly ſmooth at the back; their upper ſide marked with numerous longitudinal rough furrows. Stipula very ſhort. Spike ſolitary, erect, ſtraight and ſtiff, much broader in proportion to its length than that of any other Britiſh *Triticum*, and conſiſting of numerous alternate flat ſpikelets, of 5 or 6 florets each, perfectly ſmooth and beardleſs. The glumes are furrowed and blunt; the interior valve of the corolla flat, and fringed.

The two varieties, *Raii Syn.* 391, *n.* 5 and 6, prove, by original ſpecimens, to differ very little from this. A maritime variety of *T. repens*, *Raii Syn.* 390, *n.* 3, is often taken for *T. junceum*; and Mr. Relhan, anxious as every true naturaliſt ought to be for the promotion of truth, has authorized us to ſay that his *T. junceum*, *p.* 55, is no other. Some able botaniſts have on the other hand taken this variety, and others the true *T. junceum*, for *Elymus arenarius*.



Pubd. 1810 Published by J. Sowerby London.

GALIUM ſaxatile.

Smooth Heath Bed-ſtraw.

TETRANDRIA Monogynia.

GEN. CHAR. *Cor.* of one petal, flat, ſuperior. *Seeds* 2, roundiſh.

SPEC. CHAR. Leaves ſix in a whorl, obovate, obtuſe, tipped with a ſmall point. Stem much branched, proſtrate, ſmooth. Fruit granulated.

SYN. Galium ſaxatile. *Linn. Sp. Pl.* 154. *Sm. Fl. Brit.* 175.

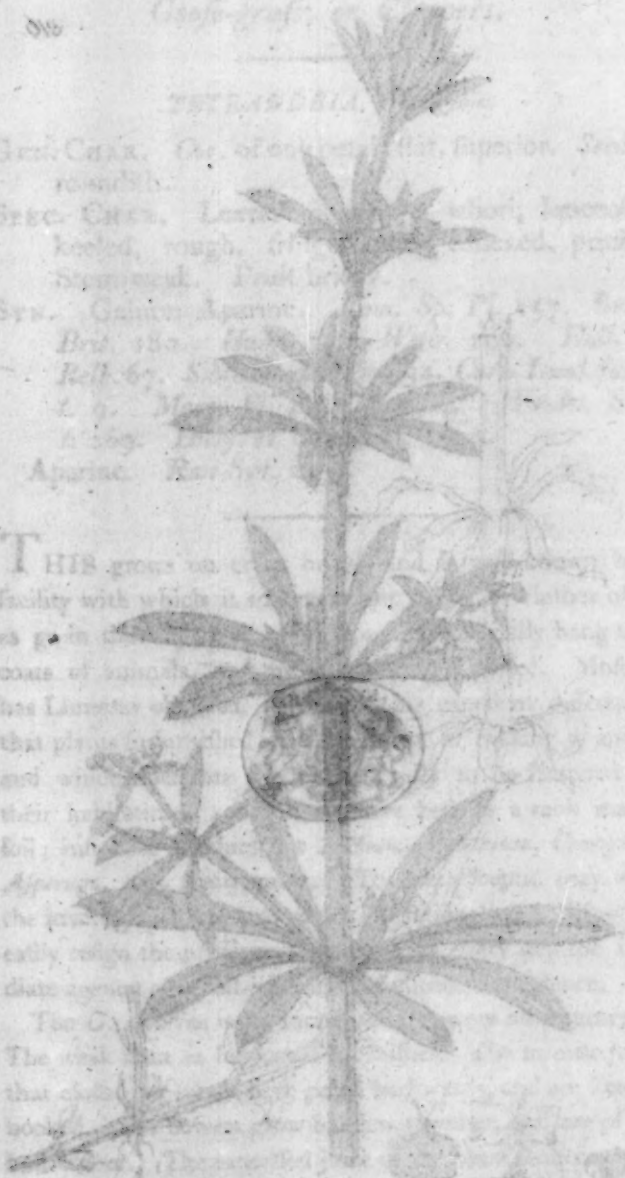
G. montanum. *Hudſ.* 67. *Relh.* 66.

G. procumbens. *With.* 187. *Hull.* 36. *Sibth.* 59. *Abbot.* 34.

Mollugo montana minor, Galio albo ſimilis. *Raii Syn.* 224.

MR. HUDSON publiſhed this plant by the name of *G. montanum* in 1762, and the ſame year Linnæus deſcribed a very different ſpecies under the ſame name. It becoming therefore neceſſary to give ours a new denomination, Dr. Withering and his followers have called it *procumbens*, none of them having been aware of its being the real *ſaxatile* of both editions of *Sp. Plantarum*.

It is very abundant in heathy buſhy places, flowering plentifully from June to the end of ſummer. The roots are perennial and creeping. Stems much branched, procumbent or ſtraggling, ſmooth, bearing numerous whorls of ſpreading obovate leaves, 6 in a whorl, each tipped with a ſhort briſtly point, and for the moſt part rough at the edge. The panicles are terminal, three-forked, ſmooth. Flowers milk-white, ſmall, but conſpicuous from their number. Fruit ſmall, neither briſtly nor ſmooth, but ſtudded all over with minute prominent granulations, by which circumſtance alone this may be known from every other Britiſh *Galium*, except the *tricorne*, which is widely different from it in other reſpects.



Pubd 1st 1819 by Sr Smith & Sowerby London.

GALIUM Aparine.

Goose-grass, or Cleavers.

TETRANDRIA Monogynia.

GEN. CHAR. *Cor.* of one petal, flat, superior. *Seeds* 2, roundish.

SPEC. CHAR. Leaves eight in a whorl, lanceolate, keeled, rough, fringed with reflexed prickles. Stem weak. Fruit bristly.

SYN. Galium Aparine. *Linn. Sp. Pl.* 157. *Sm. Fl. Brit.* 180. *Hudſ.* 70. *With.* 192. *Hull.* 36. *Relh.* 67. *Sibth.* 60. *Abbot.* 34. *Curt. Lond. faſc.* 2. *t.* 9. *Mart. Fl. Ruſt. t.* 104. *Woodv. Suppl. t.* 269. *Dickſ. H. Sicc. faſc.* 17. 3.
Aparine. *Raii Syn.* 225.

THIS grows on every hedge, and is well known by the facility with which it adheres to the hands or clothes of ſuch as go in the way of it. The ripe ſeeds eſpecially hang to the coats of animals, and are thus widely diſperſed. Moſt truly has Linnæus obſerved, in one of his excellent diſſertations, that plants ſo furniſhed with the means of ſticking to animals, and which therefore are likely finally to be ſcattered about their habitations, are ſuch as thrive beſt in a rank manured ſoil; inſtances of which are *Arctium*, *Xanthium*, *Cynogloſſum*, *Aſperugo*, and many more. The pert ſceptic may deſpiſe the inveſtigation of final cauſes; a rational naturaliſt will not eaſily reſign the privilege of adoring at every ſtep the immediate agency of an all-wiſe and beneficent Providence.

The *G. Aparine* is an annual, and flowers all ſummer long. The weak ſtem is ſupported by buſhes. The minute prickles that clothe the whole herb point backwards, and are ſomewhat hooked. The flowers grow but few together, and are of a pale buff-colour. The expreſſed juice of the plant is recommended as an antiſcorbutic. We have not had an opportunity of judging of its merits, nor does Dr. Woodville bring any freſh teſtimonies in its favour.

Plate

SYMPHYTUM officinale.

Common Comfrey.

Published Dec.r 1. 1800. by Jas Sowerby. London.

SYMPHYTUM officinale.

Common Comfrey.

PENTANDRIA Monogynia.

GEN. CHAR. Limb of the *corolla* tubular, ſwelling; its orifice cloſed with awl-ſhaped rays. *Cal.* in 5 deep ſegments. *Seeds* 4, naked.

SPEC. CHAR. Leaves ovato-lanceolate, decurrent.

SYN. Symphytum officinale. *Linn. Sp. Pl.* 195. *Sm. Fl. Brit.* 218. *Hudſ.* 81. *With.* 230. *Hull.* 47. *Relh.* 78. *Sibth.* 70. *Abbot.* 42. *Curt. Lond. faſc.* 4. *t.* 18. *Woodv. Suppl. t.* 215.

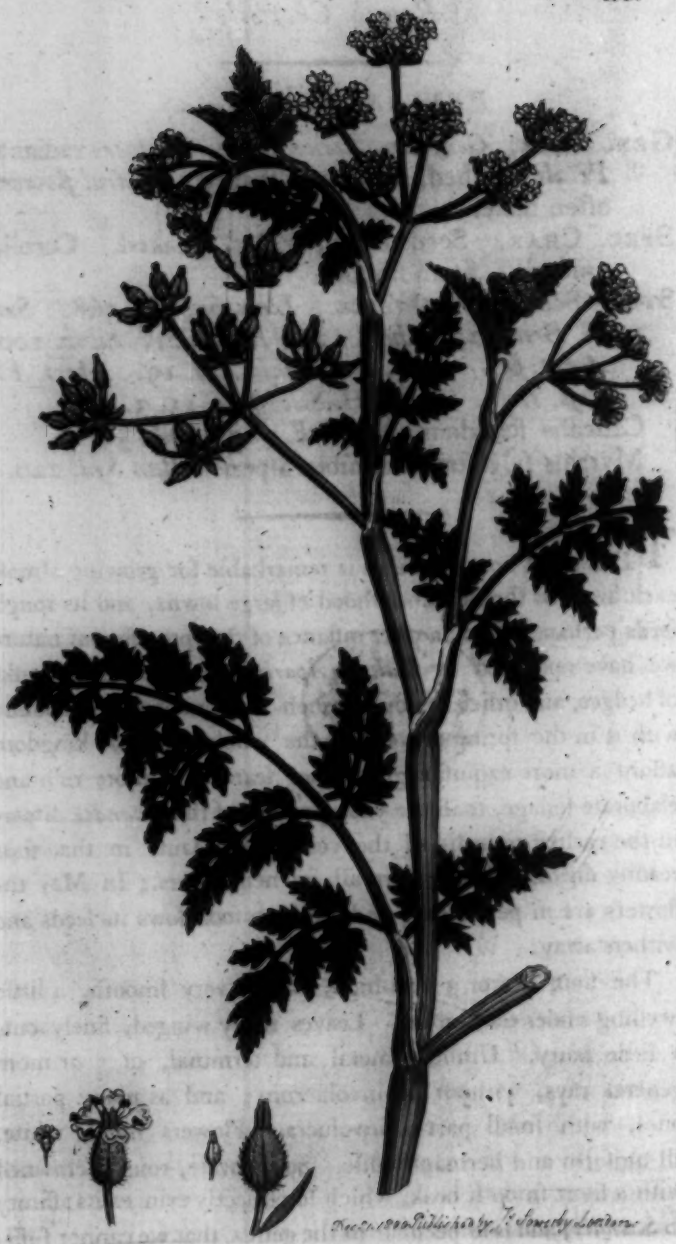
S. magnum. *Raii Syn.* 230.

A FREQUENT native of watery places, banks of rivers, and about ditches, flowering from the end of May to September.

Root perennial, fleſhy, externally black. Stem two or three feet high, upright, leafy, winged, branched at the top, clothed with ſhort briſtly hairs that point rather downward. Leaves decurrent, ovato-lanceolate, waved, pointed, veiny, rough; the radical ones on footſtalks, and broader than the reſt. Cluſters of flowers in pairs on a common ſtalk, with an odd flower between them, recurved, denſe, hairy. Corolla yellowiſh-white, ſometimes purple, the rays downy at each edge.

Dr. Sibthorp has made a new ſpecies of the red or purple-flowered variety, diſtinguiſhing it by a ſhorter and ſpreading calyx, a mark which we and ſeveral of our friends have in vain tried to diſcover.

The Comfrey root abounds in a pure taſteleſs mucilage, like that of the Marſh-mallow; and being (as Dr. Woodville obſerves) more eaſily obtained, it ought not to be omitted in liſts of medicinal plants. Such medicines are uſeful in irritations of the throat, inteſtines, and above all the bladder.



Dec.1.1800. Published by J. Sowerby, London.

SCANDIX Anthriſcus.

Rough Chervil.

PENTANDRIA Digynia.

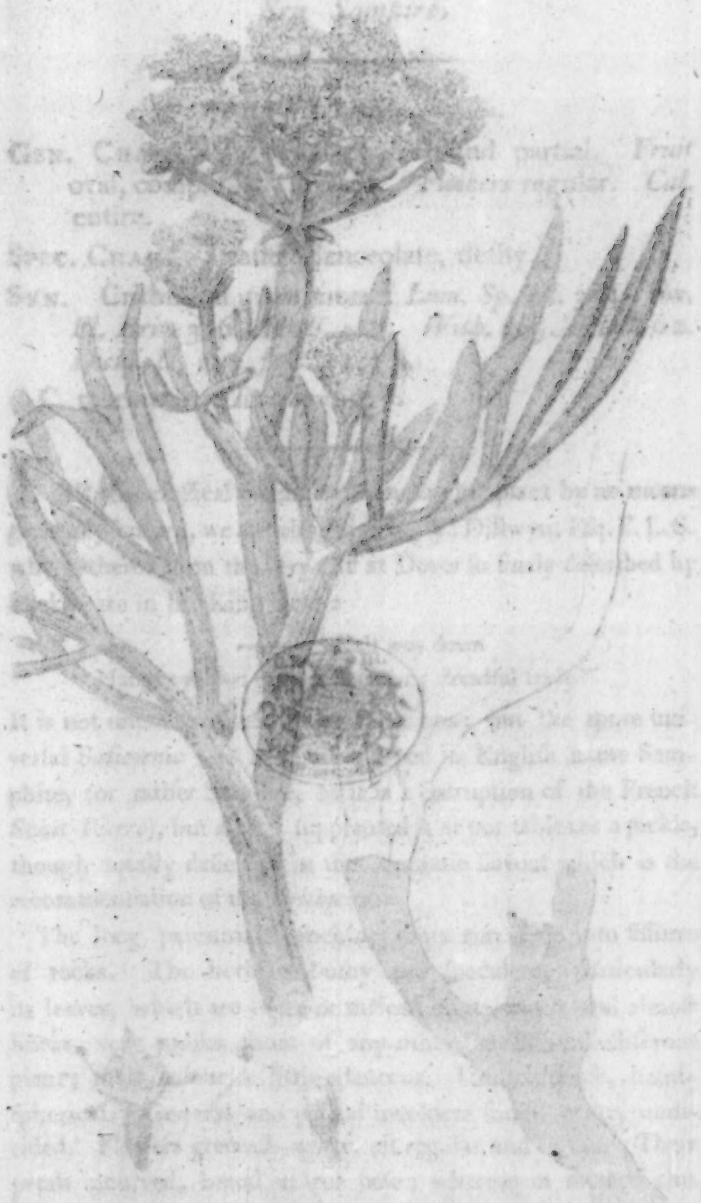
GEN. CHAR. *Gen. Involucrum* none. *Flowers* radiant. *Petals* notched. *Fruit* awl-ſhaped. *Central flowers* often male.

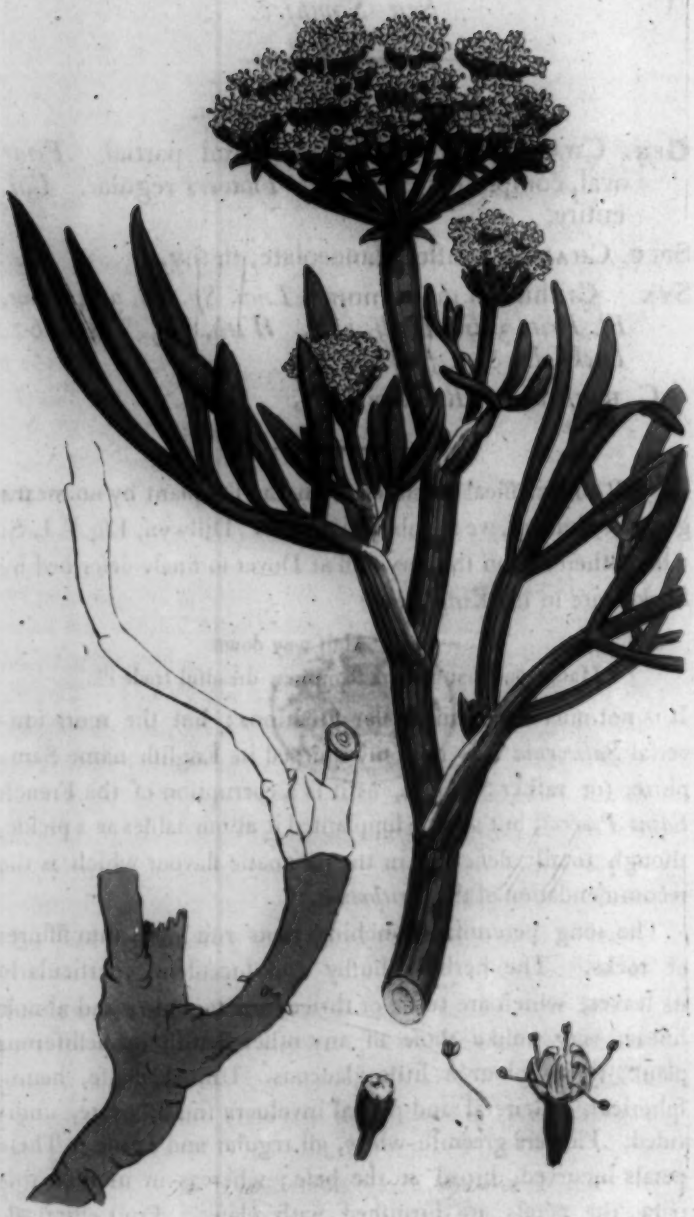
SPEC. CHAR. Seeds ovate, briſtly, beaked. Corolla uniform. Stem ſmooth.

SYN. Scandix Anthriſcus. *Linn. Sp. Pl.* 368. *Sm. Fl. Brit.* 325. *Hudſ.* 124. *Relh.* 121. *Sibth.* 100. *Abbot.* 66. *Curt. Lond. faſc.* 1. *t.* 19. *Mart. Fl. Ruſt. t.* 75. *Dickſ. H. Sicc. faſc.* 15. 3.
Caucalis ſcandicina. *With.* 289. *Hull.* 59.
Myrrhis ſylveſtris ſeminibus aſperis. *Raii Syn.* 220.

THE plant now before us is remarkable for growing almoſt excluſively in the neighbourhood of large towns, and its rough ſeeds perhaps afford another inſtance of that proviſion of nature we have remarked in *Galium Aparine*, *t.* 816. The banks of hedges, and other dry duſty much-frequented places, abound with it in the ſpring; nor does the whole vegetable kingdom afford a more exquiſite green, nor ſcarcely a more rich and elaborate foliage, than the young plants of this *Scandix* diſplay in the earlieſt months of the year. Its beauty in that ſtate readily diſtinguiſhes it from all its neighbours. In May the flowers are in perfection, and the herb ſoon ſows its ſeeds and withers away.

The ſtem is 2 or 3 feet high, round, very ſmooth, a little ſwelling under each joint. Leaves triply winged, finely cut, a little hairy. Umbels lateral and terminal, of 5 or more general rays, without an involucrum; and as many partial ones, with ſmall partial involucra. Flowers ſmall, white, all uniform and hermaphrodite. Seeds ovate, rough, crowned with a ſhort ſmooth beak, which ſo perfectly evinces its affinity to *Scandix*, and is ſo peculiar to the genus, that we cannot ſufficiently wonder at thoſe who firſt removed this plant to *Caucalis*.





CRITHMUM maritimum.

Sea Sampire.

PENTANDRIA Digynia.

GEN. CHAR. *Involucra* general and partial. *Fruit* oval, compreſſed, ſtriated. *Flowers* regular. *Cal.* entire.

SPEC. CHAR. Leaflets lanceolate, fleſhy.

SYN. Crithmum maritimum. *Linn. Sp. Pl.* 354. *Sm. Fl. Brit.* 306. *Hudſ.* 117. *With.* 295. *Hull.* 62. *Dickſ. H. Sicc. faſc.* 12. 16.

C. marinum. *Raii Syn.* 217.

FOR this claſſical ſpecimen of an Engliſh plant by no means generally known, we are obliged to L. W. Dillwyn, Eſq. F. L. S. who gathered it on the very cliff at Dover ſo finely deſcribed by Shakſpeare in his King Lear:

——" Half way down
Hangs one that gathers Sampire; dreadful trade!"

It is not uncommon in ſimilar ſituations; but the more univerſal *Salicornia* has not only uſurped its Engliſh name Samphire, (or rather Sampire, as it is a corruption of the French *Saint Pierre*), but almoſt ſupplanted it at our tables as a pickle, though totally deficient in the aromatic flavour which is the recommendation of the *Crithmum*.

The long perennial branching roots run deep into fiſſures of rocks. The herb is buſhy and ſucculent, particularly its leaves, which are twice or thrice ternate, entire and almoſt linear, very unlike thoſe of any other Britiſh umbelliferous plant; their colour a little glaucous. Umbels denſe, hemiſpherical. General and partial involucra ſmall, ovate, undivided. Flowers greeniſh-white, all regular and fertile. Their petals incurved, broad at the baſe; whereas in moſt of this tribe the petals are furniſhed with claws. Fruit elliptical, furrowed, fleſhy, ſmooth.

CRITHMUM maritimum.

Sea Samphire.

Gen. Char. Involucra general and partial. Fruit oval, compressed, striated. Flowers regular. Calycine.

Spec. Char. Leaflets lanceolate, fleshy.

Syn. Crithmum maritimum. Linn. Sp. Pl. 354. Sm. Fl. Brit. 306. Fluel. 117. With. 395. Hull. 62. Dick. 27. Sibth. Fl. Ox. 149.

C. maritimum. Linn. Syst. 217.

FOR this classical specimen of an English plant by no means generally known, we are obliged to W. Dillwyn, Esq. F.L.S. who gathered it on the very cliff at Dover to finely described by Shakspeare in his King Lear:

——— Half way down

Hangs one that gathers Samphire; dreadful trade!

It is not uncommon in similar situations; but the more usual Salicornia has not only usurped its English name Samphire, (or rather Sampire, as it is a corruption of the French Saint Pierre), but almost supplanted it as our table-sea pickle, though totally deficient in the aromatic flavour which is the recommendation of the Crithmum.

The long perennial branching roots run deep into fissures of rocks. The herb is bushy and luxuriant, particularly its leaves, which are twice or thrice ternate, entire and almost linear, very unlike those of any other British umbelliferous plants: their colour a little glaucous. Umbels double, hemispherical. General and partial involucra small, ovate, undivided. Flowers greenish-white, all regular and fertile. Their petals incurved, broad at the base; whence in most of this tribe the petals are furnished with claws. Fruit oblong-oval, somewhat fleshy, furrowed.

LICHEN *cinereus.*

838. *Grey cleft-bladed Liche*

Gen. Ch.

Fem

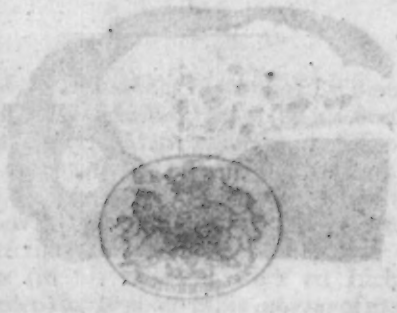
Spec.

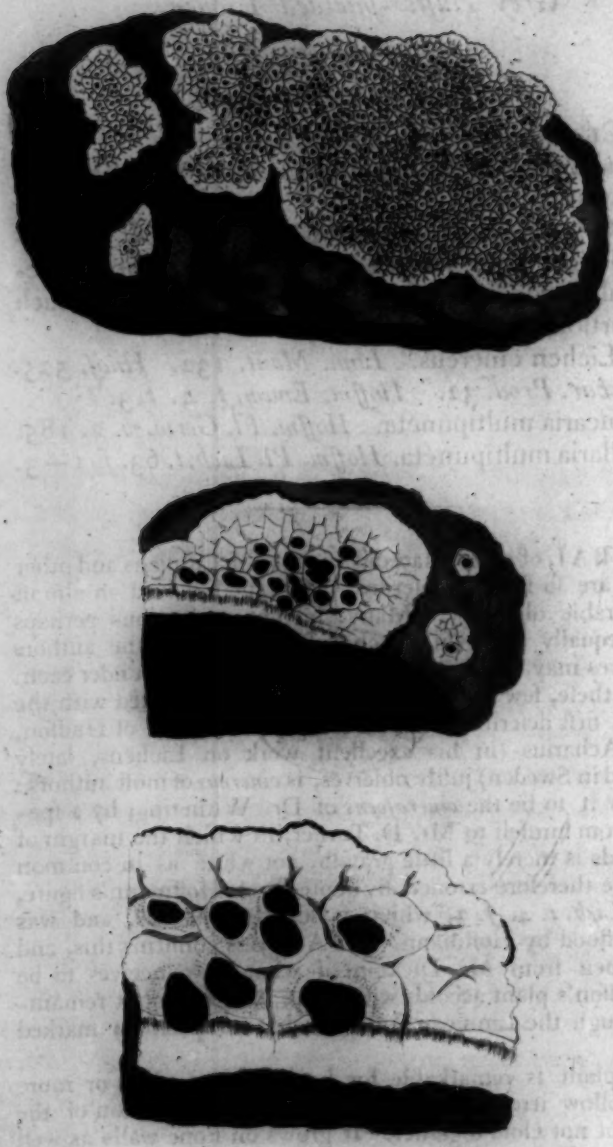
Syn. Lichen

Lichen

Verrucaria

Parelia





Dec.r 1. 1800. Published by Jas Sowerby. London.

LICHEN cinereus.

Grey cluſter-ſhielded Lichen.

CRYPTOGAMIA Algæ.

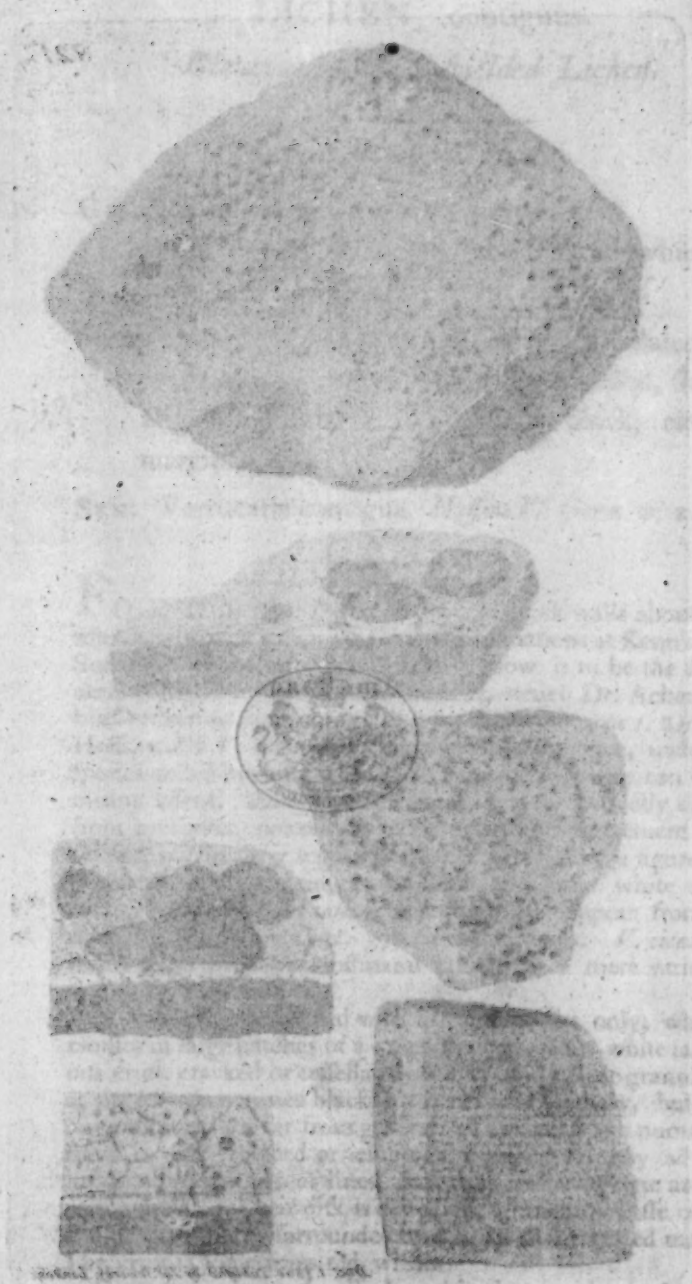
GEN. CHAR. Male, ſcattered warts.
Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

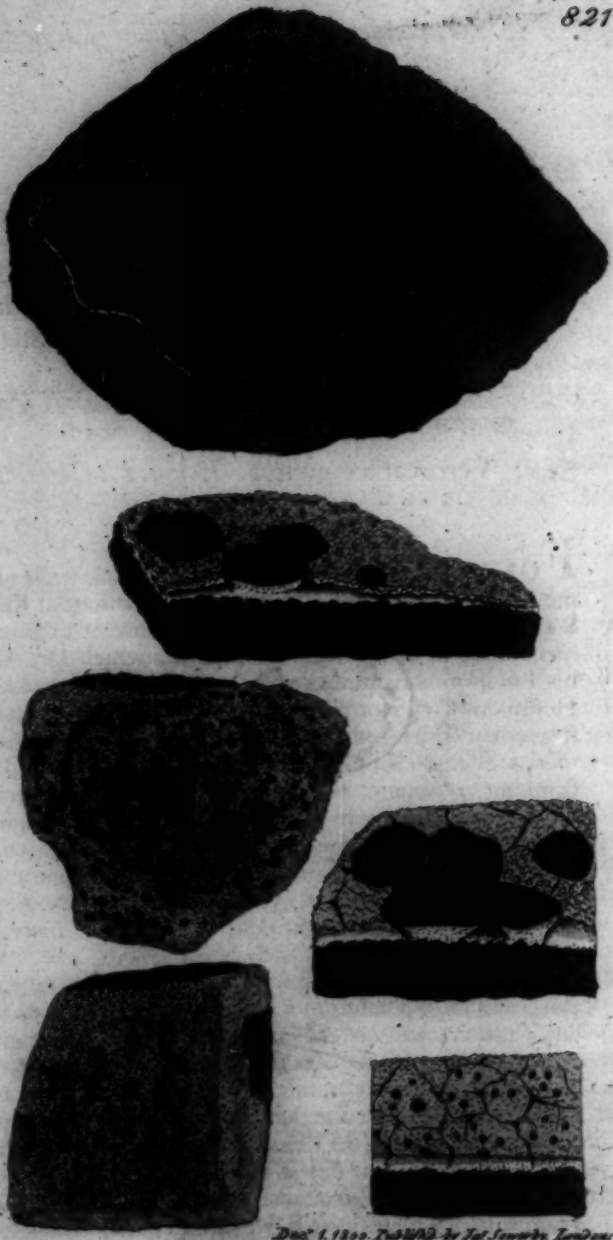
SPEC. CHAR. Cruſt grayiſh white, cracked and teſſellated, with a black edge. Shields ſunk, irregular, concave, black, often two or three in each portion of the cruſt.

SYN. Lichen cinereus. *Linn. Mant.* 132. *Hudſ.* 525. *Achar. Prod.* 32. *Hoffm. Enum. t.* 4. *f.* 3.
Verrucaria multipuncta. *Hoffm. Fl. Germ. v.* 2. 185.
Patellaria multipuncta. *Hoffm. Pl. Lich. t.* 63. *f.* 1—3.

SEVERAL of the cruſtaceous Lichens of Linnæus and other authors are ſo ſlightly deſcribed, as to be involved in almoſt impenetrable obſcurity. Many different productions perhaps accord equally well with each deſcription, and the authors themſelves may often have intended more than one under each. Among theſe, few botaniſts have been well acquainted with the *cinereus*, firſt deſcribed in the *Mantiſſa*. The *ater* of Hudſon, as Dr. Acharius (in his excellent work on Lichens, lately publiſhed in Sweden) juſtly obſerves, is *cinereus* of moſt authors: we know it to be the *cinerascens* of Dr. Withering, by a ſpecimen from himſelf to Mr. D. Turner, in which the margin of the ſhields is merely a little grayiſh, not white as in common *ater*. He therefore erroneouſly quotes Prof. Hoffmann's figure, *Enum. Lich. t.* 4. *f.* 3, which is our true *cinereus*, and was ſo underſtood by Hoffmann. As Acharius confirms this, and a ſpecimen from Mr. Dickſon of what he conceives to be Mr. Hudſon's plant accords with it, we have no doubt remaining, though the Linnæan collection has no ſpecimen marked *cinereus*.

This plant is remarkable for having frequently 2 or more of its hollow irregular ſhields ſituated in one portion of the cruſt, but not cloſe together. It grows on ſtone walls as well as rocks. On granite the cruſt is more gray than on calcareous ſtones, in which ſtate it is Hoffmann's *Patellaria multipuncta*. The Rev. Mr. Alderſon ſent theſe ſpecimens from Norfolk.





Dec.r 1. 1800. Published by Jas. Sowerby, London.

LICHEN contiguus.

Glaucous crowded-ſhielded Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, ſcattered warts.

Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

SPEC. CHAR. Cruſt glaucous-white, teſſellated and granulated. Shields cluſtered, depreſſed, flattiſh, angular, black, with a narrow, black, elevated margin.

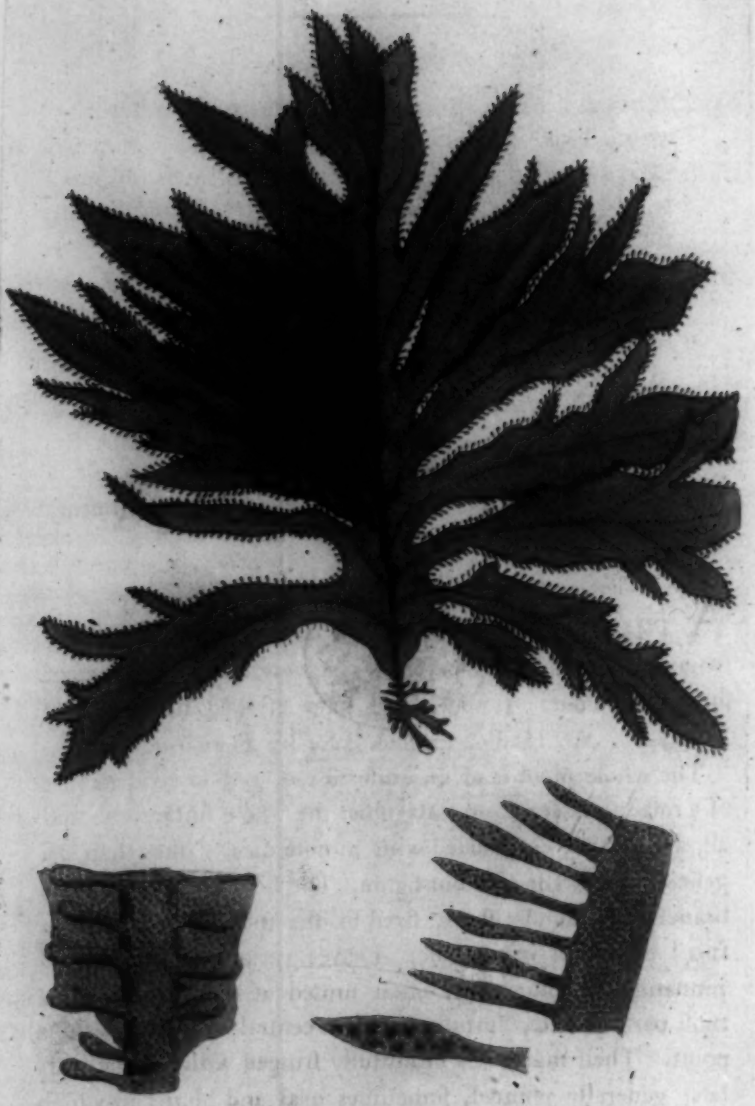
SYN. Verrucaria contigua. *Hoffm. Fl. Germ. v.* 2. 184.

FOUND by Mr. D. Turner on old brick walls about Yarmouth, and by Mr. Sowerby in ſimilar ſituations at Kennington, Surrey. Specimens from Germany ſhow it to be the *Verrucaria contigua* of Profeſſor Hoffmann, which Dr. Acharius in his Prodromus combines with our *L. concentricus t.* 246, and Hoffmann's *V. cicatricoſa*, *pantherina* and *tigrina*, under one ſpecies called by him *lapicida*. To this union we can by no means aſſent. *L. concentricus* appears to us perfectly diſtinct from *contiguus*, not only in the concentric arrangement of its ſhields, but in their regularly ſmaller ſize, concave figure, and thicker whitiſh margin, as well as in the purer white of the cruſt. Of this *V. pantherina* and *tigrina* appear from the figures, *Pl. Lichenoſæ t.* 57, to be varieties. *V. cicatricoſa* ſeems to be given by Hoffmann himſelf as a mere variety of that now before us.

This has been obſerved with us upon bricks only, which it clothes in large patches of a greeniſh or glaucous-white tartareous cruſt, cracked or teſſellated all over, and a little granulated; at the edge ſometimes blackiſh, ſometimes feathery, but theſe circumſtances are far from general. The ſhields are numerous, more or leſs crowded or cluſtered together (as they advance in age) into patches or lines, and thus rendering one another very angular. Their diſk is depreſſed, at length a little convex and rugged, black, ſurrounded by a ſharp thin elevated margin. The cruſt is ſometimes red within.

L. confluens is nearly allied to this, but its blue or blackiſh gray cruſt and more prominent ſhields ſeem to keep it diſtinct.

FUCUS fossilis.



FUCUS ſinuoſus.

Red oak-leaved Fucus.

CRYPTOGAMIA Algæ.

GEN. CHAR. *Seeds* produced in cluſtered tubercles, which burſt at their ſummits.

SPEC. CHAR. Stem round, branched. Leaves oblong, waved, acute, ſinuated or pinnatifid, fringed with minute leaflets.

SYN. Fucus ſinuoſus. *Gooden. and Woodw. in Linn. Tranſ. v.* 3. 111. *Hull.* 316.

F. rubens. *Hudſ.* 573. *Lightf.* 943. *With. v.* 4. 94. *Stackh. Ner. t.* 7.

F. roſeus. *Fl. Dan. t.* 652.

F. crenatus. *Gmel. Fuci* 184. *t.* 24. *f.* 1.

F. membranaceus purpureus latiſolius pinnatus. *Dill. in Raii Syn.* 47.

A FREQUENT ſpecies on all our ſea-coaſts, generally remarked by the moſt ſuperficial obſervers for its elegance of form and colour. It appears to have eſcaped the notice of Linnæus. Mr. Hudſon miſtook it for his *F. rubens*.

The whole plant is of an uniform red, not ſo vivid as that of a roſe. Under a ſtrong magnifier the whole ſurface, rib and all, appears thickly ſtudded with minute dots, darker than the general membrane: ſee our figure. The ſtem is round, ſlender, branched, generally ſhort, fixed to the rocks or ſtones by a ſmall expanſion of its baſe. Leaves variouſly ſinuated and pinnatifid, membranous, often united at their baſe, for the moſt part oppoſite, furniſhed with a central rib, ending in a point. Their margin is beautifully fringed with minute leaflets, generally pointed, ſometimes oval and blunt, in which ſeveral minute cluſters of ſeeds are lodged. Similar leaflets ſometimes accompany the nerve. The figures of Gmelin and the *Flora Danica* repreſent this Fucus in a more advanced and proliferous ſtate.

FUCUS canaliculatus.

Chaneelled Fucus

Published June 1. 1801. by Jas Sowerby. London.

FUCUS canaliculatus.

Channelled Fucus.

CRYPTOGAMIA Algæ.

GEN. CHAR. *Seeds* produced in cluſtered tubercles, which burſt at their ſummits.

SPEC. CHAR. Frond dichotomous, linear, channelled on one ſide, entire, nerveleſs, with blunt, forked, ſwelling, fruit-bearing tips.

SYN. Fucus canaliculatus. *Linn. Syſt. Nat. ed.* 12. *v.* 2. 716. *Hudſ.* 583. *With. v.* 4. 99. *Hull.* 322. *Gooden. and Woodw. in Linn. Tranſ. v.* 3. 172.

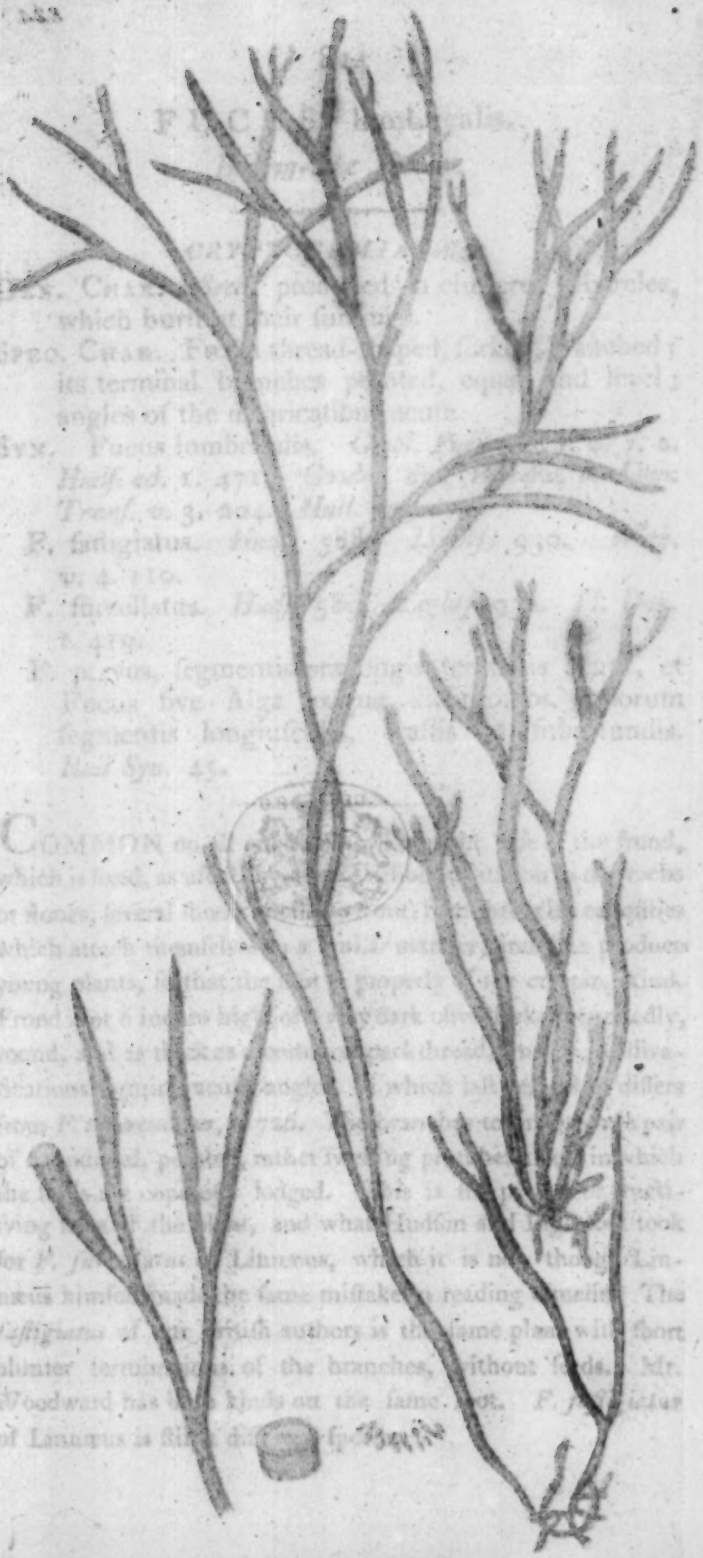
F. exciſus. *Linn. Sp. Pl.* 1627. *Syſt. Nat. ed.* 12. 715. *Fl. Dan. t.* 214.

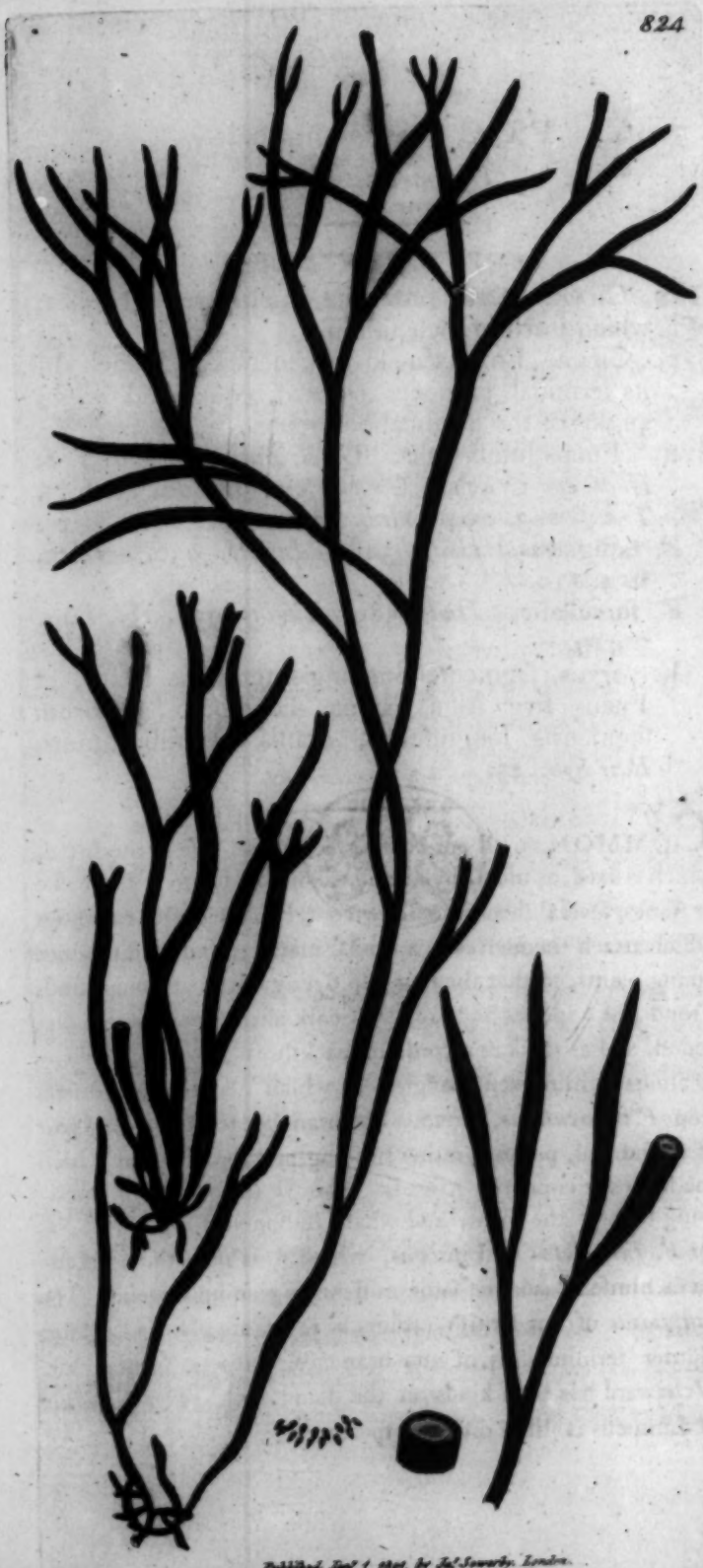
F. pumilus dichotomus, ſegmentis ex unâ parte gibboſis, ex alterâ excavatis. *Raii Syn.* 43.

NOT uncommon on ſubmarine rocks in various parts of the Britiſh coaſt; ſometimes about the mouths of large rivers.

It is known by its fronds being channelled or concave on one ſide, convex on the other, of an olive brown, branched from the very bottom in a forked manner, entire and even at the edge, notched at the tip when barren. The fructification is ſituated in ſwelling, forked or twin, rugged, oblong, terminal protuberances, of a paler and more yellowiſh olive than the reſt of the plant, ſtudded with cluſters of ſeeds.

Linnæus was not aware, when he wrote the 12th edition of his *Syſtema Naturæ*, that this Fucus was the *exciſus* of *Sp. Pl.* conſequently it occurs twice in the firſt-mentioned book. He afterwards in ſome meaſure corrected the error, by making *exciſus* a variety of *canaliculatus*; but in truth they are one and the ſame plant.





Published June 1 1821 by Jas Sowerby, London.

FUCUS lumbricalis.

Worm-like Fucus.

CRYPTOGAMIA Algæ.

GEN. CHAR. *Seeds* produced in cluſtered tubercles, which burſt at their ſummits.

SPEC. CHAR. Frond thread-ſhaped, forked, branched; its terminal branches pointed, equal and level; angles of the divarications acute.

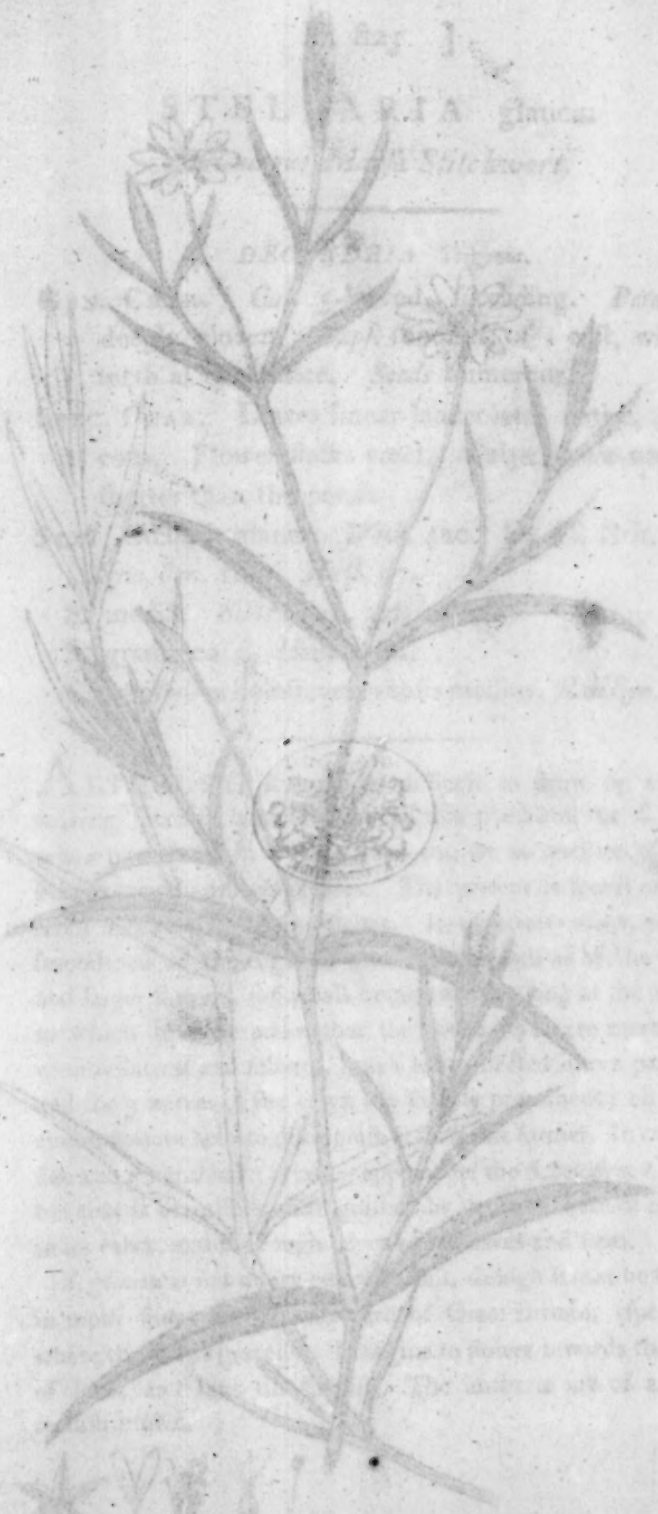
SYN. Fucus lumbricalis. *Gmel. Fuci* 108. *t.* 6. *f.* 2. *Hudſ. ed.* 1. 471. *Gooden. and Woodw. in Linn. Tranſ. v.* 3. 204. *Hull.* 325.

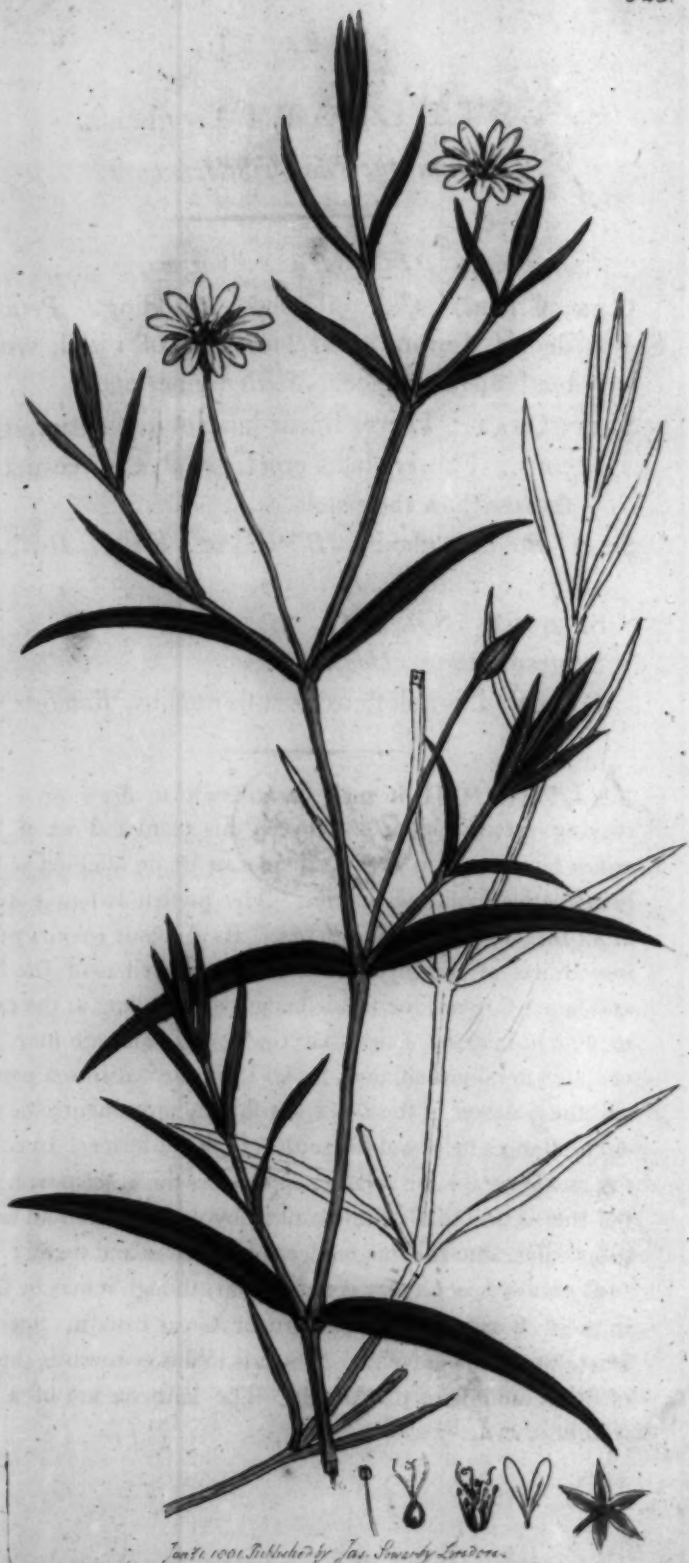
F. faſtigiatus. *Hudſ.* 588. *Lightf.* 930. *With. v.* 4. 110.

F. furcellatus. *Hudſ.* 589. *Lightf.* 932. *Fl. Dan. t.* 419.

F. parvus, ſegmentis prælongis teretibus acutis, et Fucus ſive Alga exigua dichotomos, foliorum ſegmentis longiuſculis, craſſis et ſubrotundis. *Raii Syn.* 45.

COMMON on all our coaſts. From the baſe of the frond, which is fixed, as uſual, by a ſmall callous dilatation to the rocks or ſtones, ſeveral ſhoots are thrown out, furniſhed with calloſities which attach themſelves in a ſimilar manner, and then produce young plants, ſo that the root is properly of the creeping kind. Frond 4 or 6 inches high, of a very dark olive, forked repeatedly, round, and as thick as a common packthread, ſmooth, its divarications forming acute angles, in which laſt reſpect it differs from *F. tuberculatus, t.* 726. The branches terminate in a pair of cylindrical, pointed, rather ſwelling protuberances, in which the ſeeds are copiouſly lodged. This is the perfect or fructifying ſtate of the plant, and what Hudſon and Lightfoot took for *F. furcellatus* of Linnæus, which it is not, though Linnæus himſelf made the ſame miſtake in reading Gmelin. The *faſtigiatus* of our Britiſh authors is the ſame plant with ſhort blunter terminations of the branches, without ſeeds. Mr. Woodward has both kinds on the ſame root. *F. faſtigiatus* of Linnæus is ſtill a different ſpecies.





Jan.1. 1801. Published by Jas. Sowerby, London.

STELLARIA glauca.

Glaucous Marſh Stitchwort.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* 5-leaved, ſpreading. *Petals* 5, deeply cloven. *Capſ.* ſuperior, of 1 cell, with 6 teeth at the orifice. *Seeds* numerous.

SPEC. CHAR. Leaves linear-lanceolate, entire, glaucous. Flower-ſtalks erect. Calyx three-nerved, ſhorter than the petals.

SYN. Stellaria glauca. *With.* 420. *Sm. Fl. Brit.* 475. *Sym. Syn.* 108. *Hull.* 97.

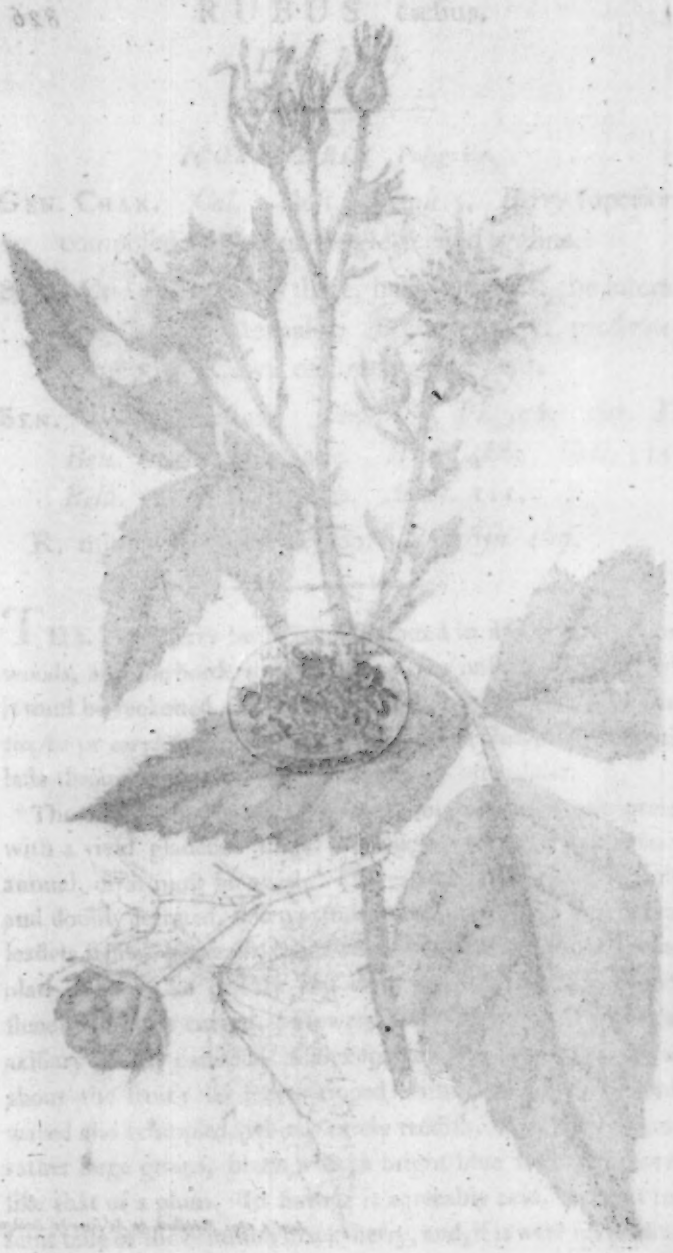
S. media. *Sibth.* 141. *Abbot.* 96.

S. graminea β. *Hudſ.* 190.

Caryophyllus holoſteus arvenſis medius. *Raii Syn.* 347.

ALTHOUGH it may be difficult to draw up a very ſtriking ſpecific character between this plant and the *S. graminea* repreſented in *t.* 803, there can be no queſtion of their being perfectly diſtinct ſpecies. The preſent is found only in moiſt meadows, or about ditches. Its glaucous colour, perfect ſmoothneſs of the edges of the leaves as well as of the ſtem, and larger flowers, the petals being twice as long as the calyx; to which may be added that the flower-ſtalks are more univerſally lateral and ſolitary, much leſs collected into a panicle, and the 3 nerves of the calyx leſs ſharply prominent; all theſe circumſtances help to diſtinguiſh it from the former. In colour, ſize and general habit it rather approaches the *S. holoſtea*, *t.* 511; but that is beautifully diſtinguiſhed by the total want of nerves in its calyx, and the rough edges of its leaves and ſtem.

S. glauca is not a very general plant, though it may be found in moiſt ſituations in many parts of Great Britain, eſpecially where the ſoil is gravelly. It begins to flower towards the end of June, and laſts till Auguſt. The antheræ are of a pale reddiſh brown.



June 1. 1801. Published by J.& J. Sowerby, London.

RUBUS cæſius.

Dew-berry.

ICOSANDRIA Polygynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Berry* ſuperior, compoſed of ſeveral ſingle-ſeeded grains.

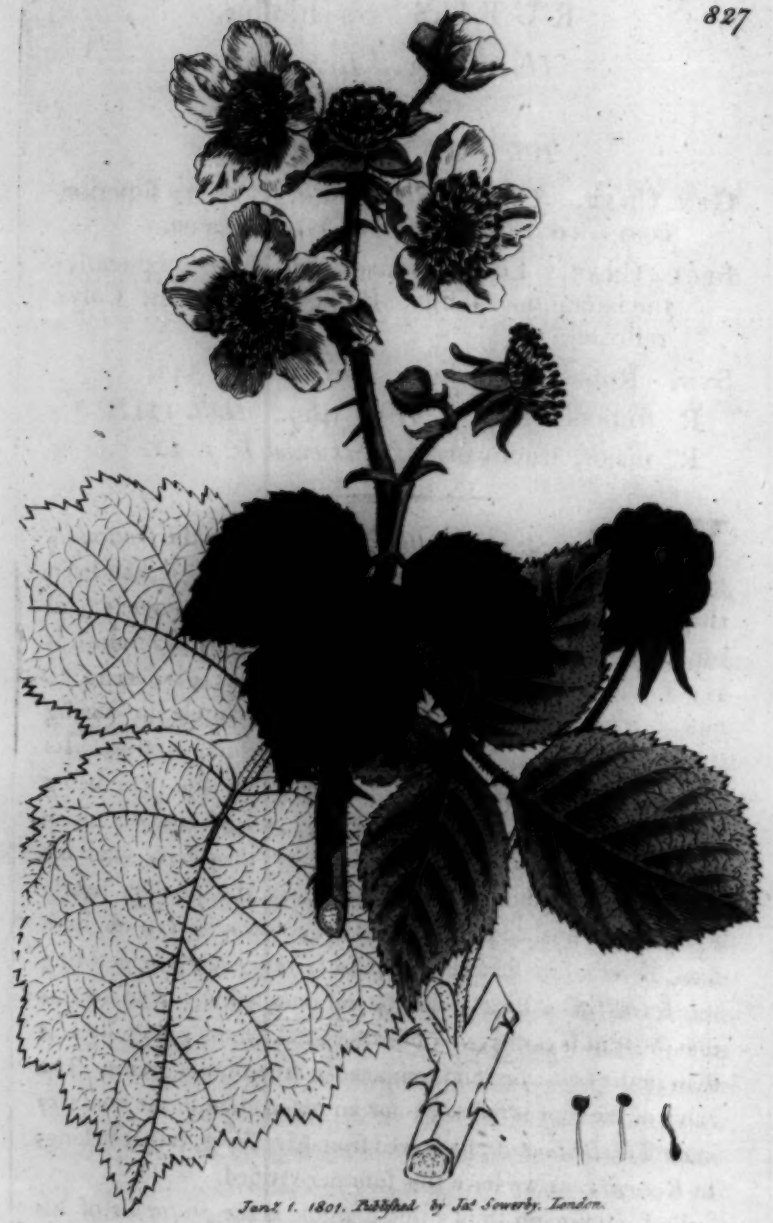
SPEC. CHAR. Leaflets three, hairy beneath; the lateral ones lobed externally. Stem prickly, proſtrate, glaucous. Calyx embracing the fruit.

SYN. Rubus cæſius. *Linn. Sp. Pl.* 706. *Sm. Fl. Brit.* 542. *Hudſ.* 220 *With.* 468. *Hull.* 111. *Relh.* 194. *Sibth.* 160. *Abbot.* 111.

R. minor, fructu cæruleo. *Raii Syn.* 467.

THE Dew-berry buſh is to be found in dry ſhady ditches, woods, and the borders of fields, not very unfrequently, though it muſt be reckoned a far leſs common plant than the *Rubus fruticoſus* or *corylifolius*. It flowers in June or July, and the fruit laſts throughout Auguſt and September; often later.

The ſtems are weak and trailing, round, prickly, pale-green with a vivid glaucous tinge. Though woody, they are only annual, or at moſt biennial. Leaves three on a ſtalk, ſharply and doubly ſerrated, downy (not hoary) beneath; the lateral leaflets ſeſſile, generally lobed on the outſide. Stipulæ lanceolate. Footſtalks prickly and downy. All the prickles are ſlender, a little curved. Flowers few together in terminal or axillary prickly panicles. Calyx ſpreading in the flower, cloſed about the fruit; its leaves tipped with long points. Petals waved and crumpled, white, rarely reddiſh. Fruit of few and rather large grains, black with a bright blue tinge or bloom like that of a plum. Its flavour is agreeably acid, without the faint taſte of the common black-berry, and, if it were ſufficiently plentiful, might be brought to table with advantage.



Jan.y 1. 1801. Published by Jas Sowerby, London.

RUBUS corylifolius.

Hazel-leaved Bramble.

ICOSANDRIA Polygynia.

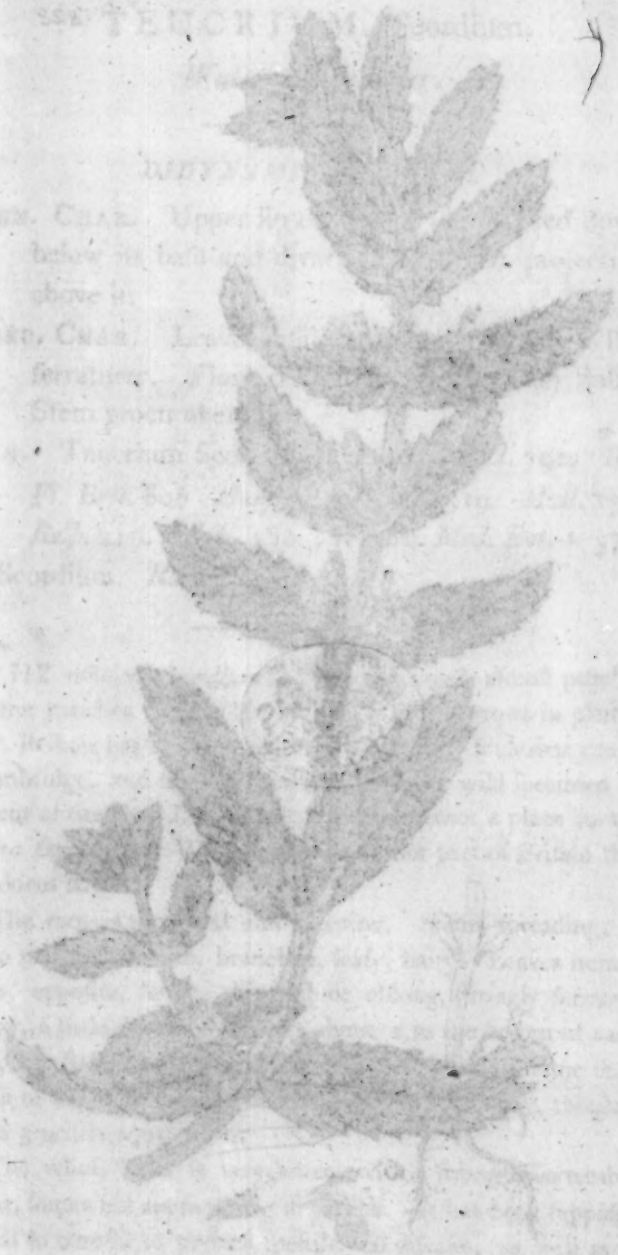
GEN. CHAR. *Cal.* 5-cleft. *Petals* 5. *Berry* ſuperior, compoſed of ſeveral ſingle-ſeeded grains.

SPEC. CHAR. Leaflets generally five, hairy beneath; the lateral ones ſeſſile. Prickles ſtraightiſh. Calyx reflexed.

SYN. Rubus corylifolius. *Sm. Fl. Brit.* 542.
R. fruticoſus major. *With.* 469. *Hull.* 111.
R. major, fructu nigro. *Schmidel Ic. t.* 2.

WE have alluded to this *Rubus* in deſcribing the *fruticoſus*, *t.* 715. Although equally common with that, it has been altogether neglected, or at moſt allowed to be a variety, till Mr. Crowe examined, and, in our opinion, fully aſcertained it as a ſpecies. Dillenius, in Ray's Synopſis p. 467, ſeems to hint at it as differing from the common bramble in having "earlier, larger, and white bloſſoms;" which is true. Its more eſſential differences however conſiſt in the ſtem being roundiſh, biennial, not truly ſhrubby and perennial; much more brittle; ſo that it is rejected by thatchers, who uſe the other for binding their thatch; all the prickles nearly ſtraight, not hooked; the leaflets large, always green on both ſides, never white beneath, ſometimes very exactly reſembling the leaves of a hazel; the lateral ones ſeſſile. Add to this that the fruit is earlier, of a browner black, more gratefully acid than in the *fruticoſus*, and compoſed of rather fewer grains. The calyx of the fruit is reflexed; for an obſervation to the contrary in the *Flo. Britannica*, borrowed from Mr. Wigg, rather belongs to *R. cæſius*, as we have this ſummer verified.

Prof. Hoffmann thinks this bramble is the *fruticoſus* of his German Flora for 1800, and the true *fruticoſus* his *tomentoſus*; but a ſpecimen communicated by Dr. Schrader proves the latter to be quite different from both ours.



Jan.ʸ 1.1801. Published by Jas. Sowerby

TEUCRIUM Scordium.

Water Germander.

DIDYNAMIA Gymnoſpermia.

GEN. CHAR. Upper lip of the *corolla* divided down below its baſe and divaricated. *Stam.* projecting above it.

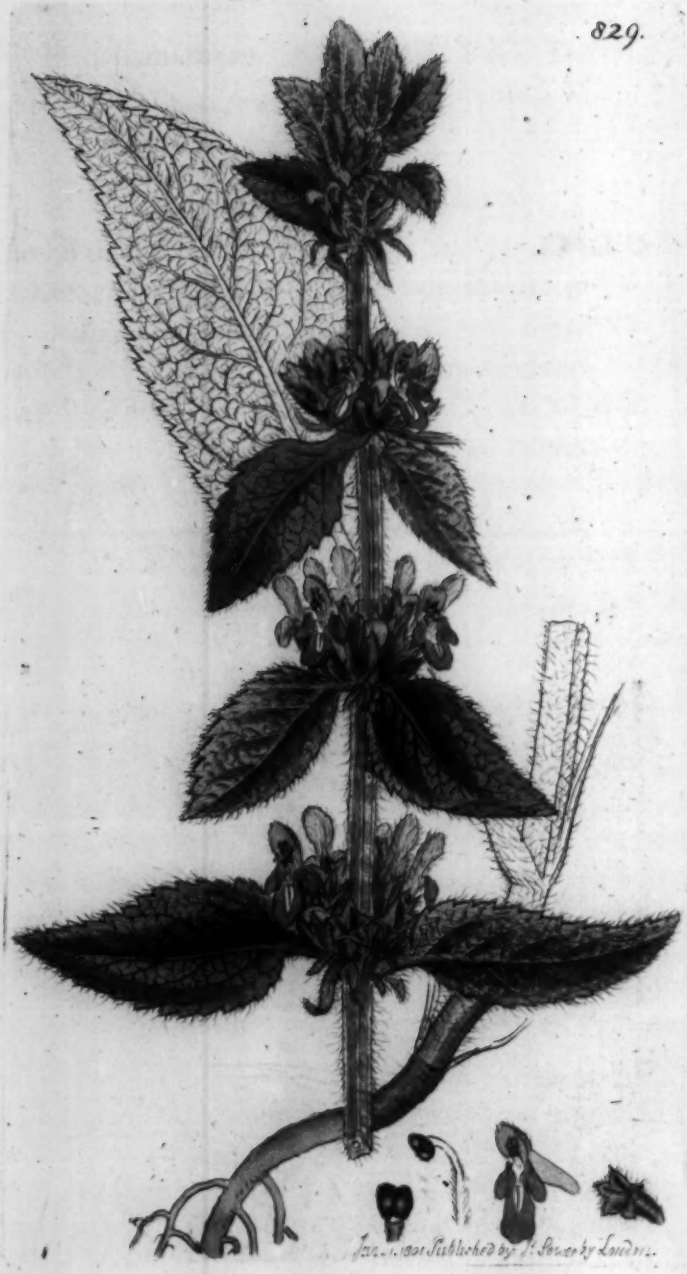
SPEC. CHAR. Leaves ſeſſile, oblong, with tooth-like ſerratures. Flowers axillary, in pairs, on ſtalks. Stem procumbent.

SYN. Teucrium Scordium. *Linn. Sp. Pl.* 790. *Sm. Fl. Brit.* 606. *Hudſ.* 247. *With.* 519. *Hull.* 130. *Relh.* 219. *Sibth.* 180. *Woodv. Med. Bot. t.* 57. Scordium. *Raii Syn.* 246.

THE officinal *Scordium* has been ſuppoſed almoſt peculiar to the marſhes of the Iſle of Ely, where it grows in plenty. Mr. Relhan has however obſerved it in ſeveral ſituations nearer Cambridge, and from thence we received a wild ſpecimen by favour of the Rev. J. Holme. It has moreover a place in the *Flora Oxoñienſis*. We know of no other part of Britain that produces it.

The root is perennial and creeping. Stems ſpreading, or even proſtrate, ſquare, branched, leafy, hairy. Leaves numerous, oppoſite, ſeſſile, elliptical or oblong, ſtrongly ſerrated, veiny, a little downy. Flowers about 2 in the boſom of each leaf, on ſtalks, pale purple, ſmaller and leſs handſome than thoſe of the Wall Germander, *t.* 680. Calyx downy, tubular, with 5 nearly equal teeth.

The whole herb is very bitter, with a ſtrong diſagreeable ſcent, ſomewhat approaching to garlick. It has been ſuppoſed uſeful to cure or to prevent peſtilential diſeaſes, as well as to remove obſtructions, expel worms, and cleanſe ulcers—a ſort of key to all locks, now grown ruſty and out of uſe.



Jan.1.1821 Published by J.Sowerby London.

STACHYS germanica.

Downy Woundwort.

DIDYNAMIA Gymnoſpermia.

GEN. CHAR. *Cal.* 5-cleft, awned. Upper lip of the *corolla* vaulted; lower reflexed at the ſides, the large middle ſegment notched. *Stamina* when old bent outwards.

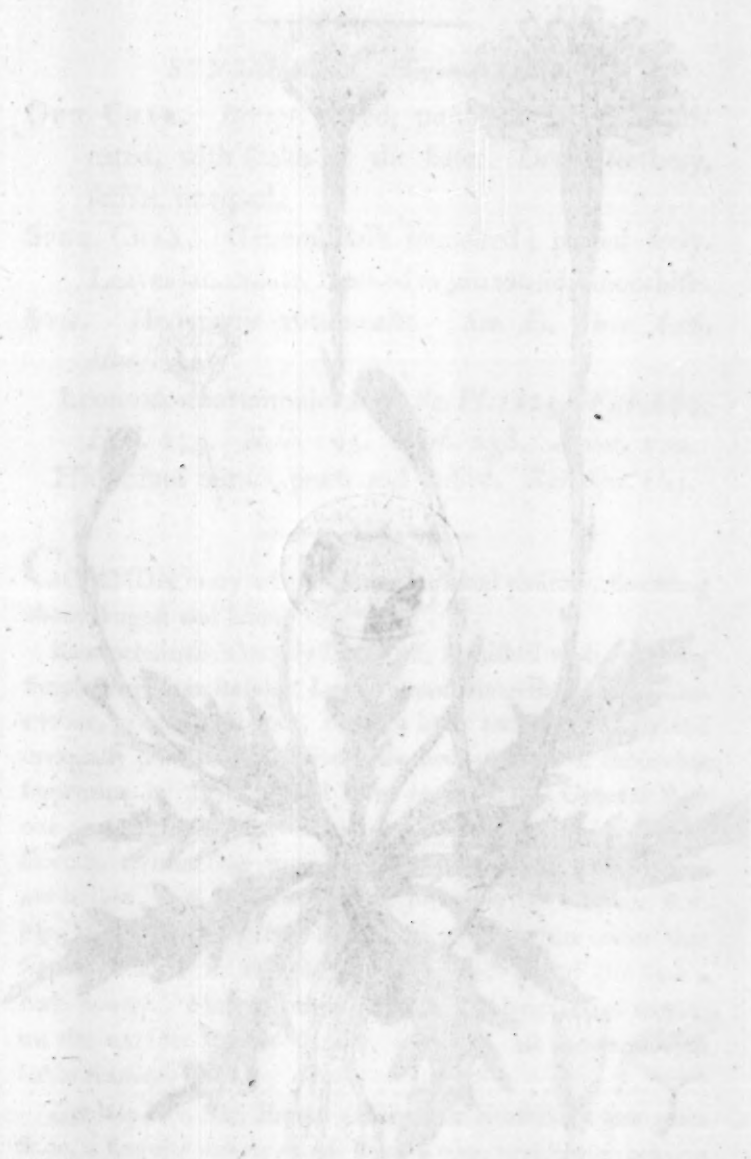
SPEC. CHAR. Many flowers in a whorl. Leaves crenate. Stem woolly, erect.

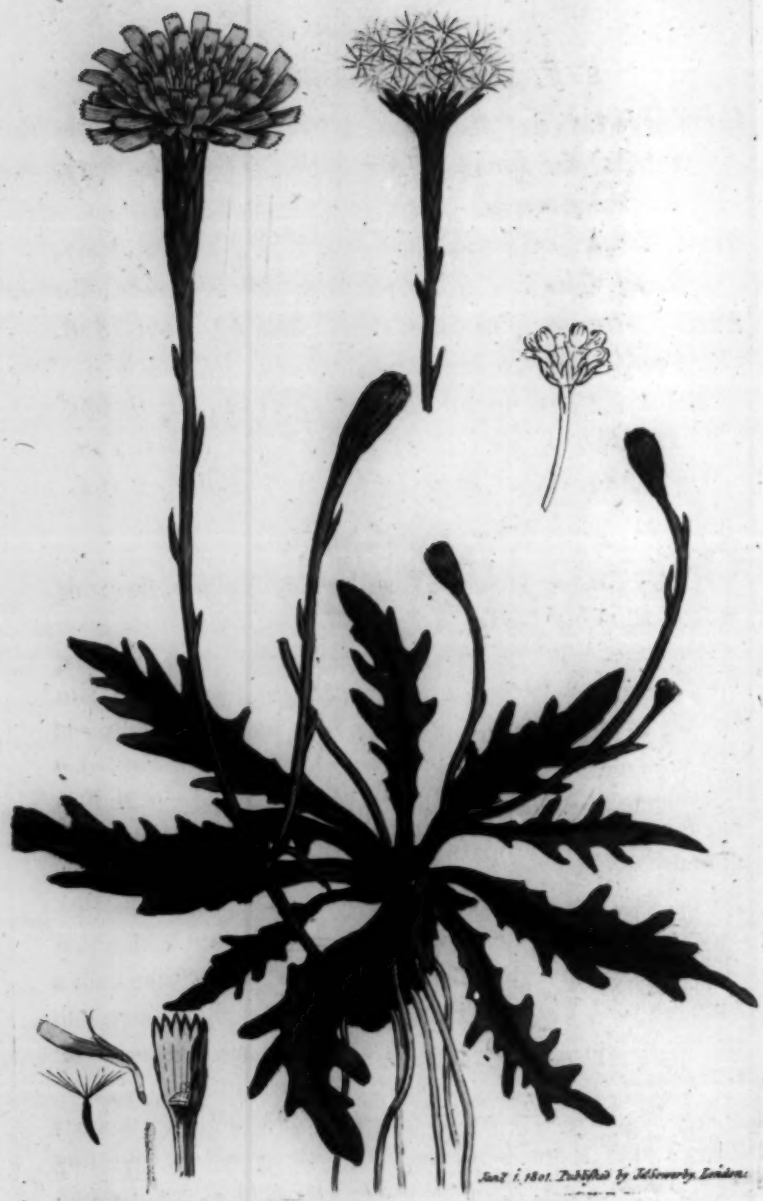
SYN. Stachys germanica. *Linn. Sp. Pl.* 812. *Sm. Fl. Brit.* 634. *Hudſ.* 259. *With.* 532. *Hull.* 132. *Sibth.* 186.

S. Fuchſii. *Raii Syn.* 239.

IN corn-fields and by way-ſides on the limeſtone ſoil of Oxfordſhire the *Stachys germanica* has long been obſerved; but the Rev. Mr. Hemſted diſcovered this plant on a hill 2 miles from Bedford in September laſt, a new Britiſh ſtation for it, from whence he favoured us with the preſent ſpecimen.

The root is perennial. Whole herb remarkably inveſted with a white ſoft filky pubeſcence, in which reſpect it is only inferior to the garden *Stachys lanata*, a ſpecies that differs from it beſides in having blunter leaves, ſtems procumbent at the baſe, and taking root at that part. The ſtems of our plant are erect. Leaves ovate, rather pointed, ſharply crenate, reticulated with veins, ſilky above, moſt woolly beneath; the radical ones on long ſtalks; the reſt ſmaller and nearly ſeſſile. Whorls axillary, numerous, many-flowered; the upper ones crowded. Bracteæ linear. Flowers purple within, ſtreaked about the mouth with white; their outſide whitiſh and very downy, eſpecially the upper lip. Stamina hairy. Seeds roundiſh, black.





Sept 1, 1801. Published by J.Sowerby, London.

HEDYPNOIS autumnalis.

Autumnal Hedypnois.

SYNGENESIA Polygamia-æqualis.

GEN. CHAR. *Recept.* naked, punctate. *Cal.* imbricated, with ſcales at the baſe. *Down* feathery, ſeſſile, unequal.

SPEC. CHAR. General ſtalk branched; partial ſcaly. Leaves lanceolate, toothed or pinnatifid, ſmoothiſh.

SYN. Hedypnois autumnalis. *Sm. Fl. Brit.* 826. *Hudſ.* 341.

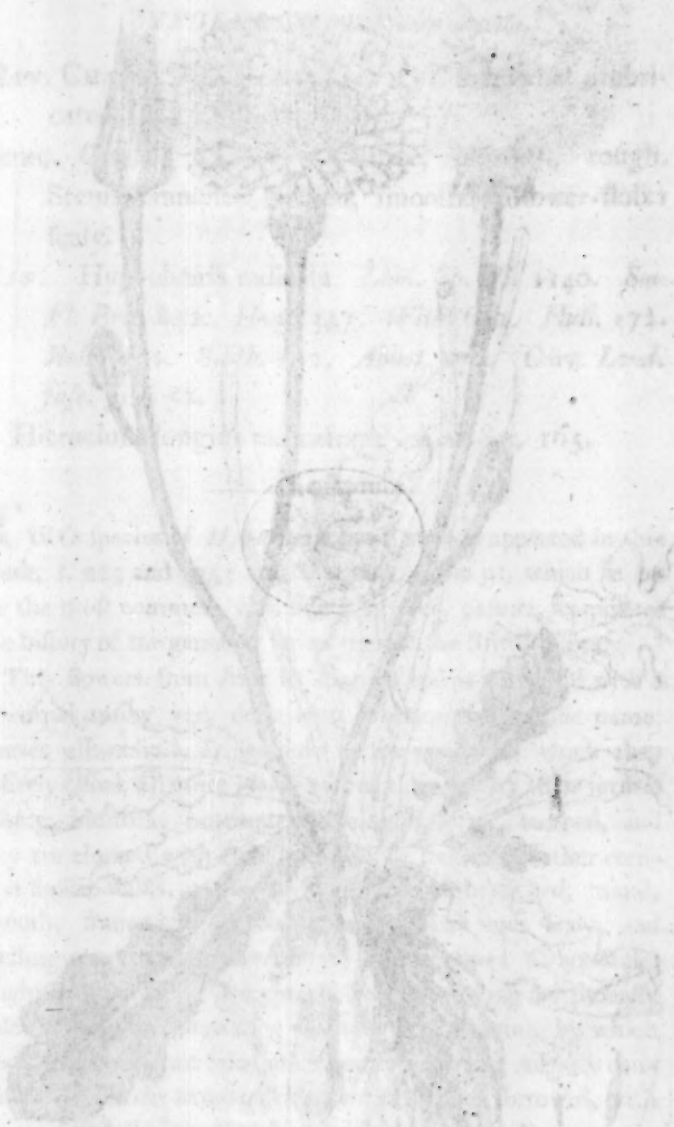
Leontodon autumnale. *Linn. Sp. Pl.* 1123. *With.* 680. *Hull.* 173. *Relh.* 295. *Sibth.* 238. *Abbot.* 170.

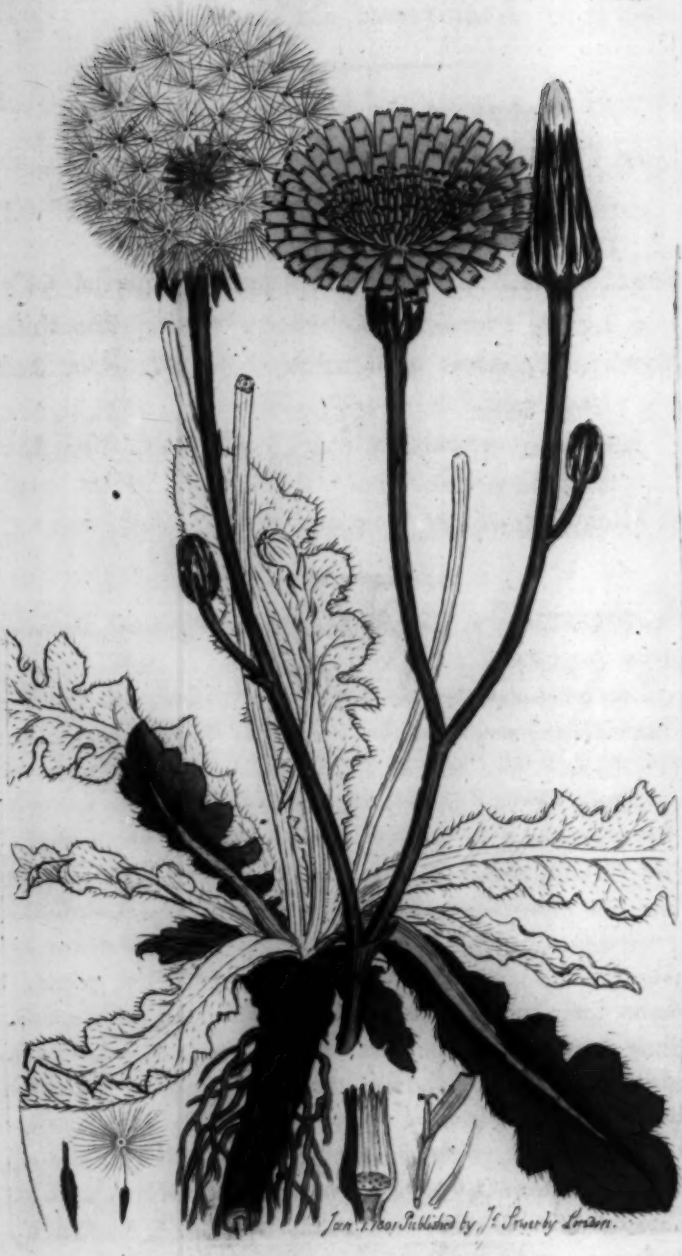
Hieracium minus, præmorsâ radice. *Raii Syn.* 164.

COMMON every where in meadows and paſtures, flowering about Auguſt and later.

Root perennial, abruptly bitten off, furniſhed with very long ſimple fibres from its ſides. Leaves almoſt altogether radical, lanceolate, generally ſmooth, rarely a little rough, variouſly and unequally pinnatifid or merely toothed, oblique or ſomewhat ſerpentine in their general form or poſition. General ſtalk one or more, ſpreading, curved and zigzag, branched, not quite ſmooth, terminating in a few long ſcaly flower-ſtalks which are hollow, and according to the juſt obſervation of the Rev. Mr. Holme each contains a little tuft of very white cotton that ſeems peculiar to the plant. Calyx and top of the ſtalk a little downy. Flowers bright-yellow, not large, often reddiſh on the outſide. Seeds ſlender, furrowed, all crowned with ſeſſile feathery down.

The late Rev. Mr. Bryant obſerved in Norfolk, a few years ſince, a ſingular variety whoſe flowers were proliferous, bearing from the margin of their receptacle a ſeries of leſſer flowers on ſtalks, much like the hen-and-chicken daiſy.





Jan.1.1801 Published by J.t Sowerby London.

HYPOCHÆRIS radicata.

Long-rooted Cat's-ear.

SYNGENESIA Polygamia-æqualis.

GEN. CHAR. *Recept.* chaffy. *Cal.* ſomewhat imbricated. *Down* feathery.

SPEC. CHAR. Leaves runcinate, bluntiſh, rough. Stems branched, naked, ſmooth. Flower-ſtalks ſcaly.

SYN. Hypochæris radicata. *Linn. Sp. Pl.* 1140. *Sm. Fl. Brit.* 842. *Hudſ.* 347. *With.* 692. *Hull.* 172. *Relh.* 301. *Sibth.* 242. *Abbot.* 172. *Curt. Lond. faſc.* 3. *t.* 52.

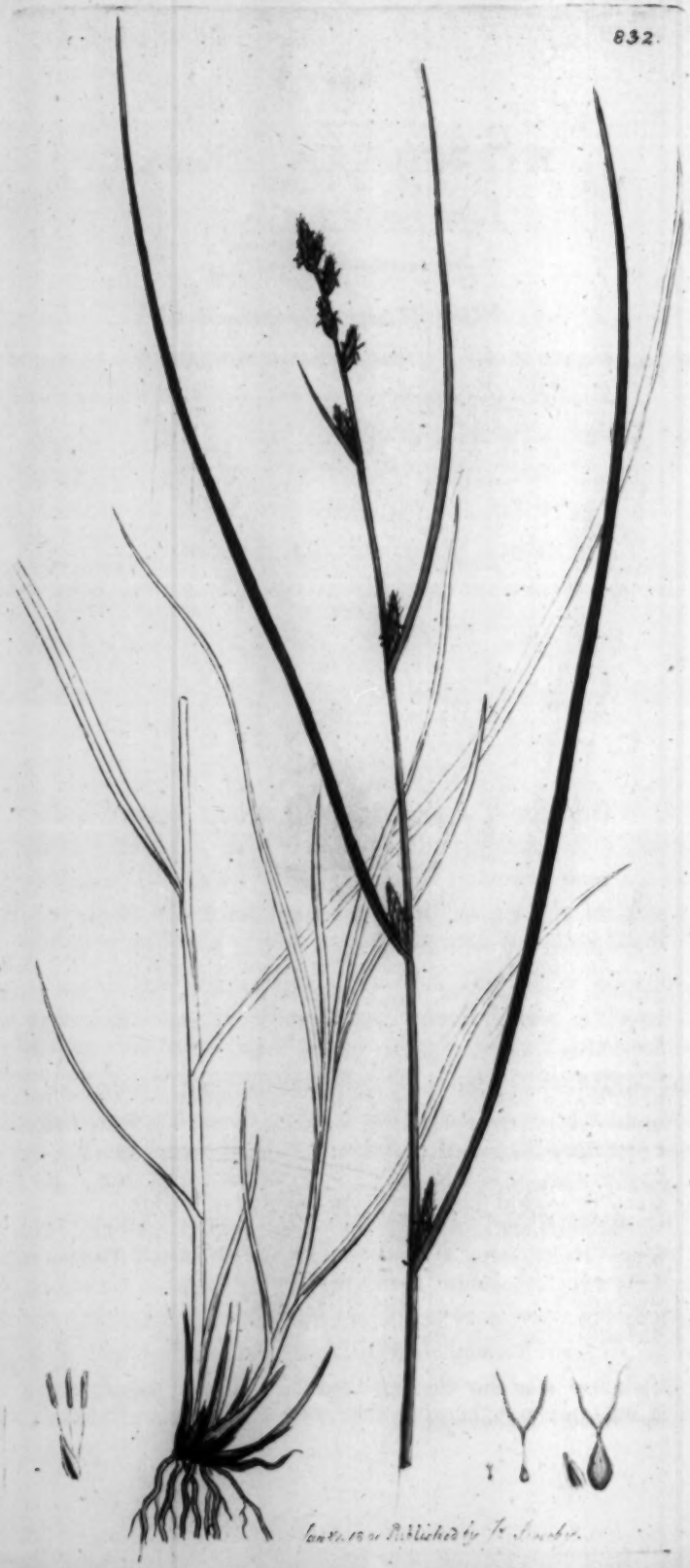
Hieracium longiùs radicatum. *Raii Syn.* 165.

TWO ſpecies of *Hypochæris* have already appeared in this work, *t.* 225 and 575; and that now before us, which is by far the moſt common, abounding in every paſture, completes the hiſtory of the genus as far as regards the Britiſh Flora.

This flowers from June to Auguſt, and is furniſhed with a perennial milky very deep root, whence the ſpecific name. Leaves all radical, lying cloſe to the earth, by which they entirely choak all other plants within their reach; their form is oblong, bluntiſh, runcinate inclining to lyrate, toothed, and they are clothed with rigid hairs. The ſtems, or rather common flower-ſtalks, are upright, very much branched, round, ſmooth, ſomewhat glaucous; the partial ones ſcaly, and ſwelling upwards. Flowers large, bright yellow. Calyx-ſcales roughiſh at the keel. Receptacle beſet with long ſharp chaffy ſcales among the florets, the character of the genus, by which this is at once known from other common plants, vulgarly confounded under the name of Hawkweeds. Seeds furrowed, with minute tubercles on the intermediate ridges. Down on a ſtalk, feathery and rough.

HYPOCHÆRIS radicata.

Long-rooted Cat's-ear.



London, 1806. Published by J. Sowerby.

CAREX remota.

Remote Carex.

MONOECIA Triandria.

GEN. CHAR. Male, *Catkin* imbricated. *Cal.* of 1 ſcale. *Cor.* none. Female, *Catkin* imbricated. *Cal.* of 1 ſcale. *Cor.* none. *Stigmas* 2 or 3. *Seed* clothed with a ſwelling tunic.

SPEC. CHAR. Spikelets ſolitary, remote, androgynous, nearly ſeſſile. Bracteæ very long, ſurmounting the ſtem. Seed-tunic almoſt entire.

SYN. Carex remota. *Linn. Sp. Pl.* 1383. *Sm. Fl. Brit.* 969. *Gooden. Tr. of Linn. Soc. v.* 2. 150. *Hudſ.* 407. *With.* 88. *Hull.* 205. *Relh.* 351. *Sibth.* 28. *Abbot.* 203.

C. axillaris. *Linn. Sp. Pl.* 1382.

Gramen cyperoides anguſtifolium, ſpicis parvis ſeſſilibus in foliorum alis. *Raii Syn.* 424.

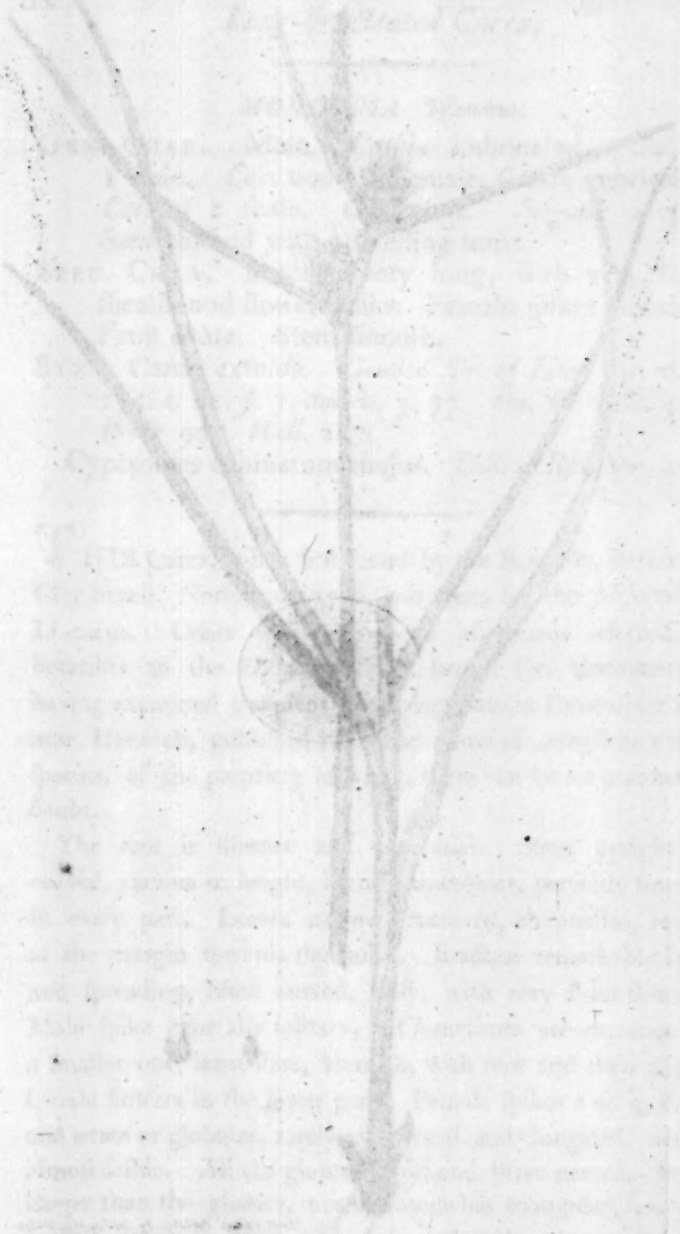
A NATIVE of moiſt groves, and banks of ditches in ſhady ſituations, not unfrequent, flowering in May and June.

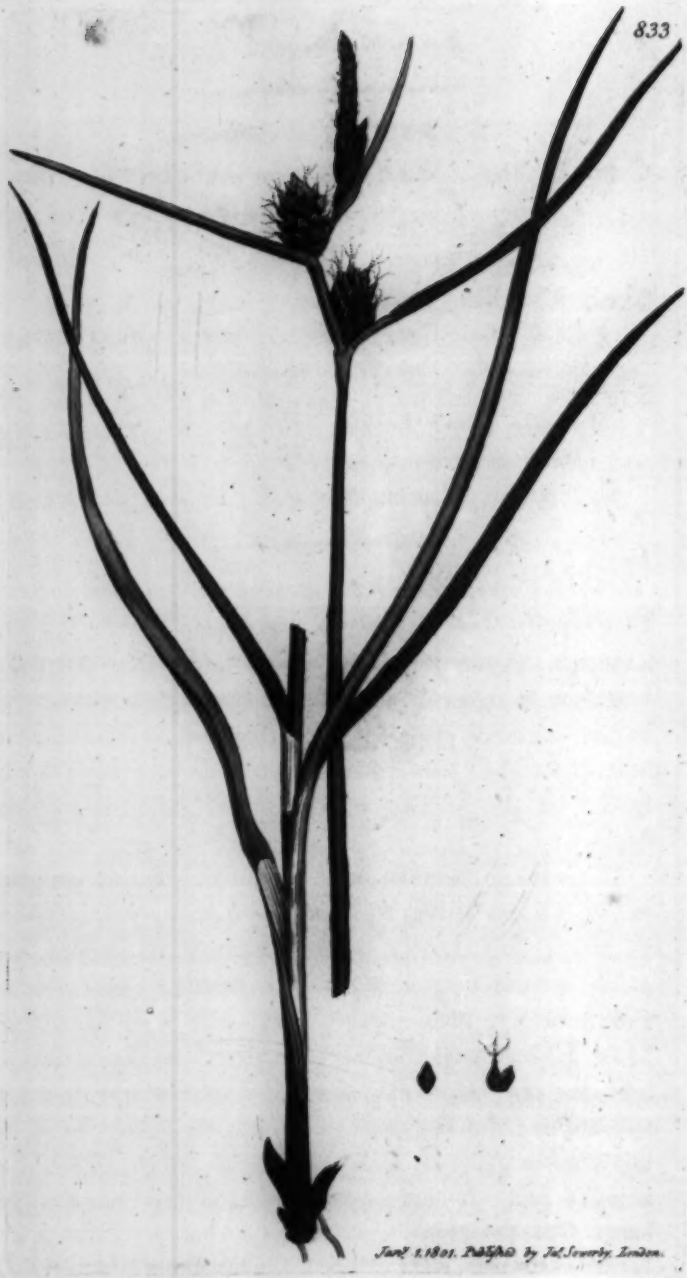
Root fibrous, perennial. Plant ſlender and weak, of a pale whitiſh green. Stem about a foot high, triangular, and rough upwards, ſmooth and roundiſh below, leafy. Leaves long and narrow, rough at their edge. Spikelets alternate, ſolitary, 6, 8 or more, ovate, androgynous or compoſed of male and female flowers; 3 or 4 of the lowermoſt are very diſtant, and each is accompanied by a very long upright leafy bractea, taller than the top of the ſtem; the upper ſpikelets are more approximated, and have very ſhort bracteæ. The male flowers ſtand below the female in every ſpikelet. The glumes are ovate, membranous and white at the edge, green at the back, with a keel turning brown as they advance in age. Fruit ovate, pointed, erect, longer than the glumes, roughiſh at the edge in the upper part, generally entire at the orifice. Seed lentil-ſhaped. Stigmas two.

C. axillaris of Dr. Goodenough differs in having cluſtered ſpikelets and cloven ſeed-caſes. The original *axillaris* of Linnæus is no other than the *remota* adopted from Plukenet, &c.

CAREX remota.

Remote Carex.





June 1.1801. Published by Jas. Sowerby, London.

CAREX extenſa.

Long-bracteated Carex.

MONOECIA Triandria.

GEN. CHAR. Male, *Catkin* imbricated. *Cal.* of 1 ſcale. *Cor.* none. Female, *Catkin* imbricated. *Cal.* of 1 ſcale. *Cor.* none. *Stigmas* 2 or 3. *Seed* clothed with a ſwelling tunic.

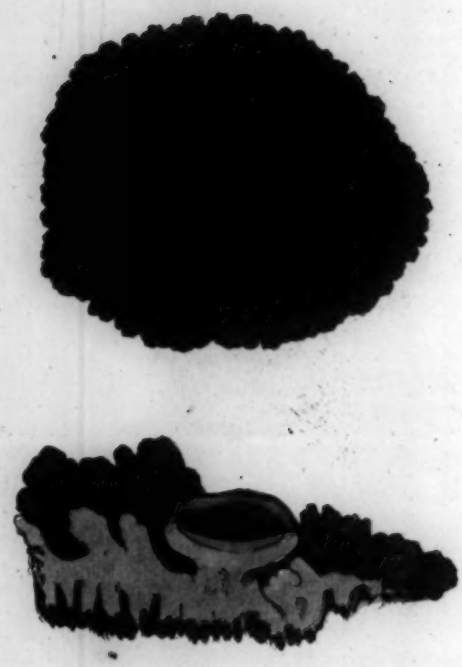
SPEC. CHAR. Bracteæ very long, with very ſhort ſheaths and flower-ſtalks. Female-ſpikes roundiſh. Fruit ovate. Stem ſmooth.

SYN. Carex extenſa. *Gooden. Tr. of Linn. Soc. v.* 2. 175. *t.* 21. *f.* 7. *and v.* 3. 77. *Sm. Fl. Brit.* 992. *With* 99. *Hull.* 207.

Cyperoides echinatum majus. *Dill. in Raii Syn.* 421.

THIS Carex, when firſt found by the Rev. Mr. Bryant on Cley beach, Norfolk, in 1776, was taken for the *filiformis* of Linnæus. Other ſpecimens were afterwards referred by botaniſts to the *C. flava*. At length Dr. Goodenough, having examined the plant in a living ſtate in Devonſhire and near Harwich, publiſhed it by the name of *extenſa* as a new ſpecies, of the propriety of which there can be no manner of doubt.

The root is fibrous and perennial. Stem upright or curved, various in height, bluntly triangular, perfectly ſmooth in every part. Leaves narrow, recurved, channelled, rough at the margin towards the point. Bracteæ remarkably long and ſpreading, often curved, leafy, with very ſhort ſheaths. Male ſpike generally ſolitary, but ſometimes accompanied by a ſmaller one, lanceolate, bluntiſh, with now and then a few female flowers in the lower part. Female ſpikes 2 or 3, ſhort and ovate or globular, rarely cylindrical and elongated, erect, almoſt ſeſſile. All the glumes broad and three-nerved. Fruit longer than the glumes, ovate, ſomewhat triangular, ſcarcely beaked, browniſh-green, ribbed, ſmooth at the edges, and every where deſtitute of pubeſcence. Seed triangular, gibbous.



Jan.ʸ 1. 1801. Published by Jas. Sowerby. London.

LICHEN crispus.

Crisped gelatinous Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, scattered warts.
Female, smooth shields or tubercles, in which the seeds are imbedded.

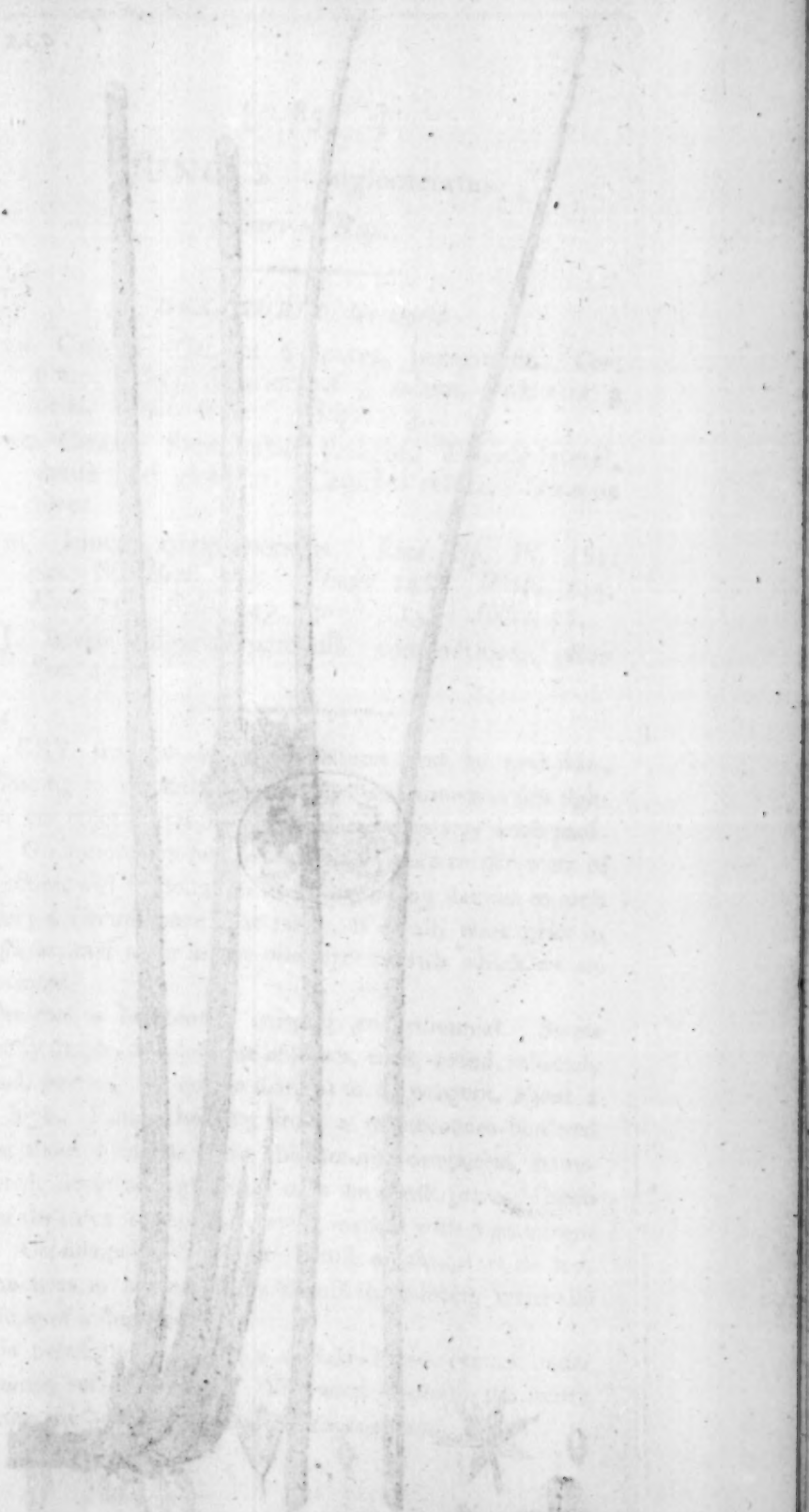
SPEC. CHAR. Gelatinous, olive-green, imbricated, orbicular, lobed and notched, with crisped and granulated leaves in the centre. Shields flat, red-brown, scattered.

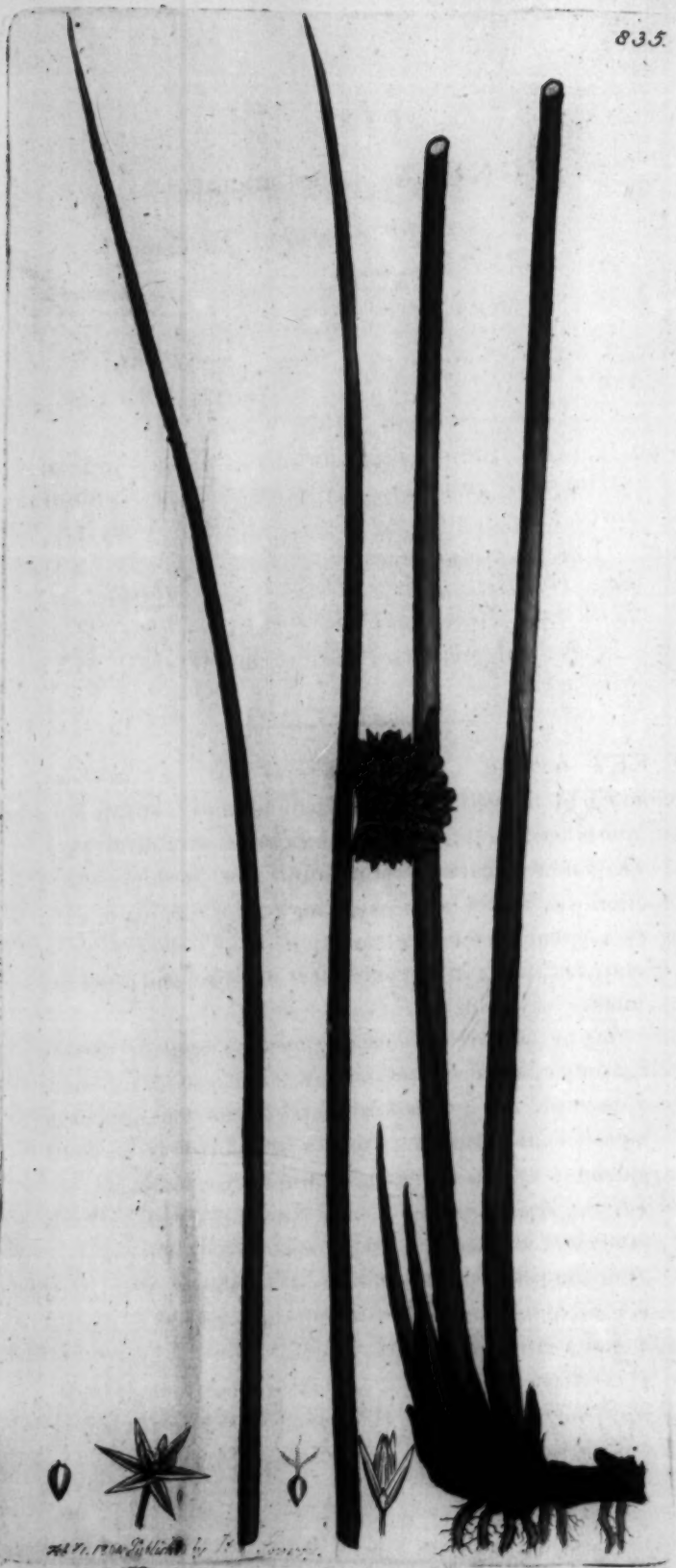
SYN. Lichen crispus. *Linn. Syst. Nat. ed.* 12. *v.* 2. 710. *Hudſ.* 535. *With. v.* 4. 76. *Hull.* 301. *Relh.* 427. *Sibth.* 327. *Achar. Prod.* 126.
Lichenoides gelatinosum atrovirens, crispum et rugosum. *Dill. Muſc.* 139. *t.* 19. *f.* 23.

OF all the various and intricate tribe of Lichens, the gelatinous species are the most difficult of determination. They all nearly agree in their greenish olive hue, turning almost black when dry, in which state indeed they all for the most part shrivel up into an undistinguishable mass. When moist they are pulpy, tender, often very thick, in some instances so thin as to be membranous.

The *crispus*, though sometimes with difficulty known from luxuriant plants of the *cristatus*, is in general easily to be recognized. It grows in wet shady places under rocks, stones, or walls, assuming a roundish figure, variously imbricated, wrinkled or lobed, though never in its whole substance elevated from the soil. The surface is crowded with irregular blunt leaflets, which towards the centre become lobed, curled, and frequently granulated. The shields are numerous, scattered, with a flat reddish disk (greener when young), and a blunt irregular elevated margin, of the colour and substance of the leaf.

This plant is scarcely to be detected but after a continuance of moist weather.





JUNCUS conglomeratus.

Common Ruſh.

HEXANDRIA Monogynia.

GEN. CHAR. *Cal.* of 6 leaves, permanent. *Cor.* none. *Capſ.* ſuperior, of 3 valves, with 1 or 3 cells. *Seeds* ſeveral. *Stigmas* 3.

SPEC. CHAR. Stem naked, ſtraight. Panicle lateral, denſe and globular. Capſules retuſe. Stamina three.

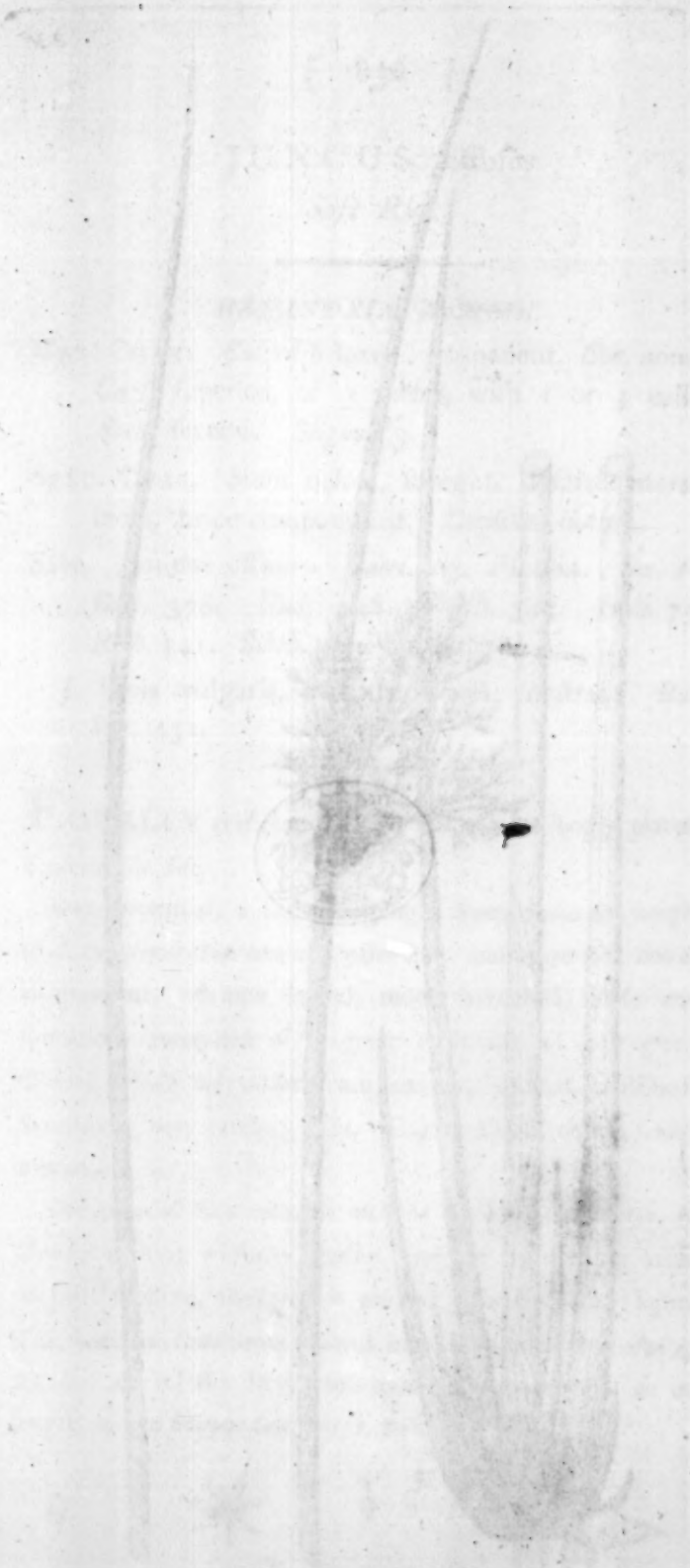
SYN. Juncus conglomeratus. *Linn. Sp. Pl.* 464. *Sm. Fl. Brit.* 376. *Hudſ.* 148. *With.* 345. *Hull.* 75. *Relh.* 140. *Sibth.* 113. *Abbot.* 78.

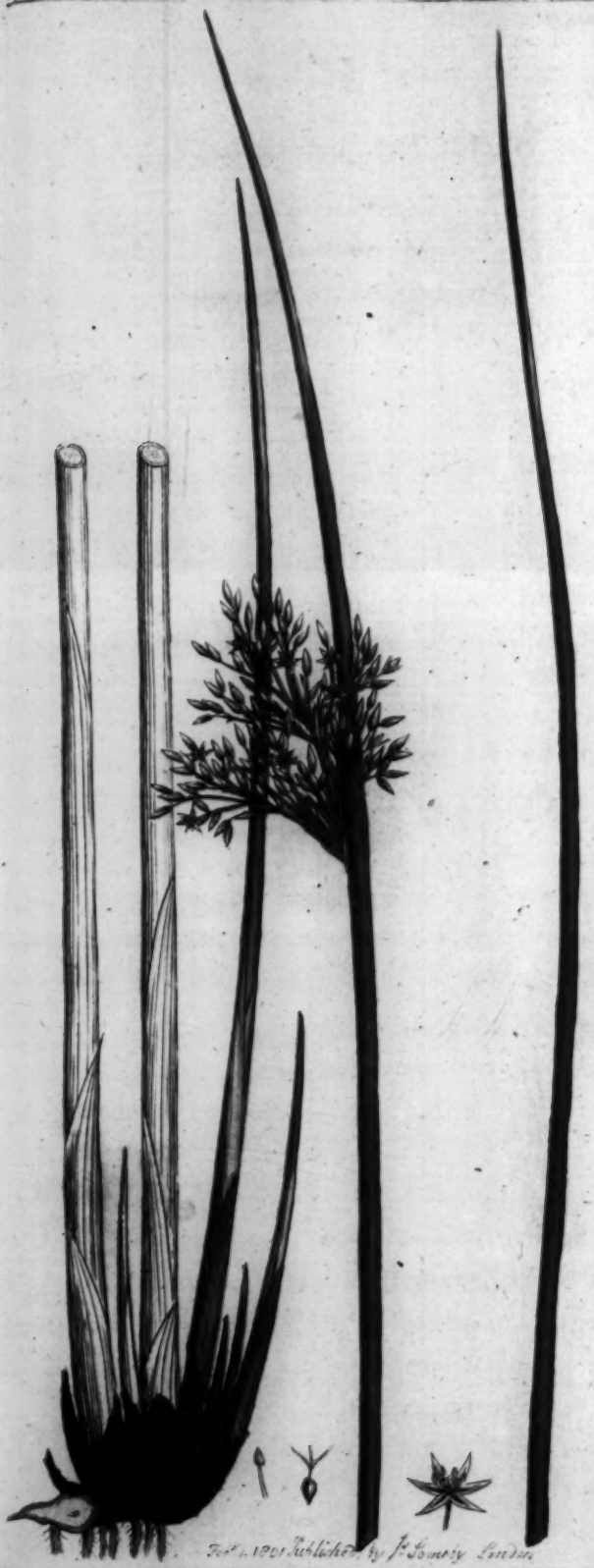
J. lævis vulgaris, paniculâ compactiore. *Raii Syn.* 432.

VERY frequent in moiſt paſtures and by road-ſides, bloſſoming in the early part of July, and known at firſt ſight from our other lateral-flowering ruſhes by its very denſe panicle. On a more accurate ſcrutiny a ſtill more certain mark of diſtinction will be found in its having only 3 ſtamina to each flower; a circumſtance that rarely, if at all, takes place in *J. effuſus*, and never in any other ſpecies with which we are acquainted.

The root is horizontal, creeping and perennial. Stems perfectly ſimple, and deſtitute of leaves, erect, round, minutely ſtriated, pointed, but not ſo ſharp as to be pungent, about 2 feet high. Panicle burſting from a membranous-bordered fiſſure about 6 inches below the ſummit, compound, many-flowered, denſe and globular, of a browniſh green. Each leaf of the calyx is lanceolate, acute, marked with 2 prominent ribs. Capſule poliſhed, obovate, retuſe or abrupt at the top, inſomuch as to be ſometimes almoſt three-lobed, internally conſiſting of a ſingle cell.

It is neceſſary to correct a miſtake in our remark under *J. glaucus*, vol. 10. p. 665. The word *effuſus* in the fourth line from the bottom ought to be *conglomeratus*.





Feb.1.1801 Published by J.Sowerby London

JUNCUS effuſus.

Soft Ruſh.

HEXANDRIA Monogynia.

GEN. CHAR. *Cal.* of 6 leaves, permanent. *Cor.* none. *Capſ.* ſuperior, of 3 valves, with 1 or 3 cells. *Seeds* ſeveral. *Stigmas* 3.

SPEC. CHAR. Stem naked, ſtraight. Panicle lateral, looſe, thrice compounded. Capſules obtuſe.

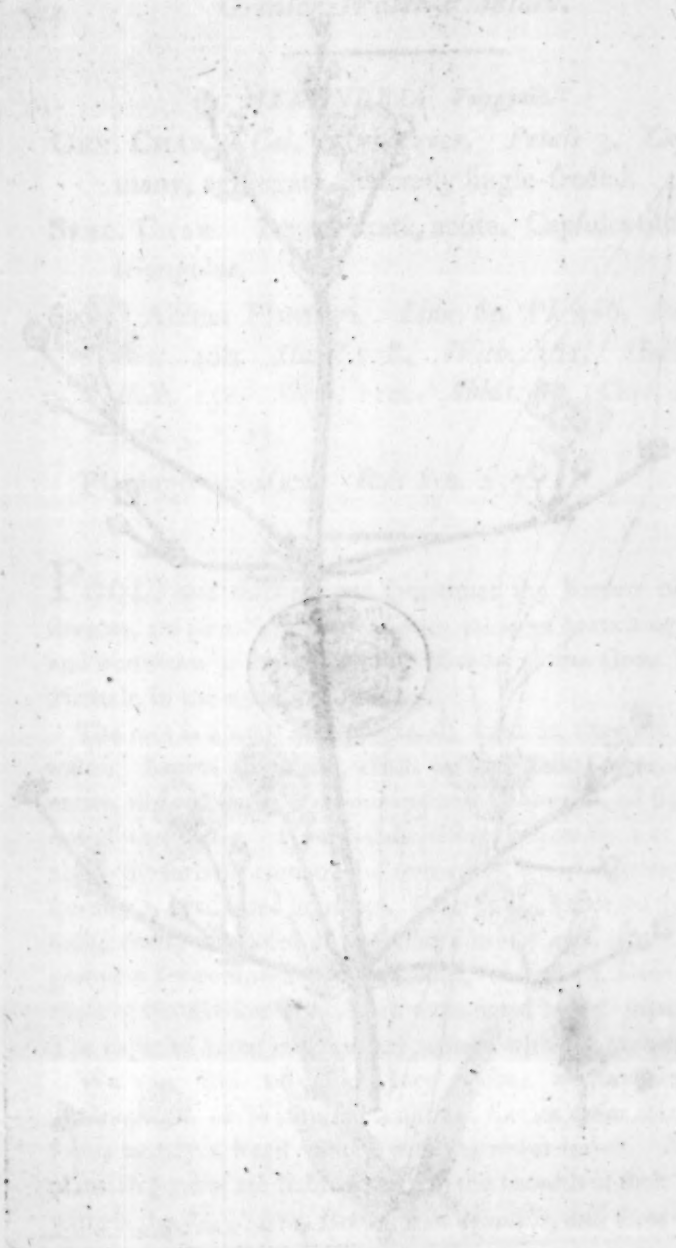
SYN. Juncus effuſus. *Linn. Sp. Pl.* 464. *Sm. Fl. Brit.* 376. *Hudſ.* 148. *With.* 345. *Hull.* 75. *Relh.* 141. *Sibth.* 113. *Abbot.* 78.

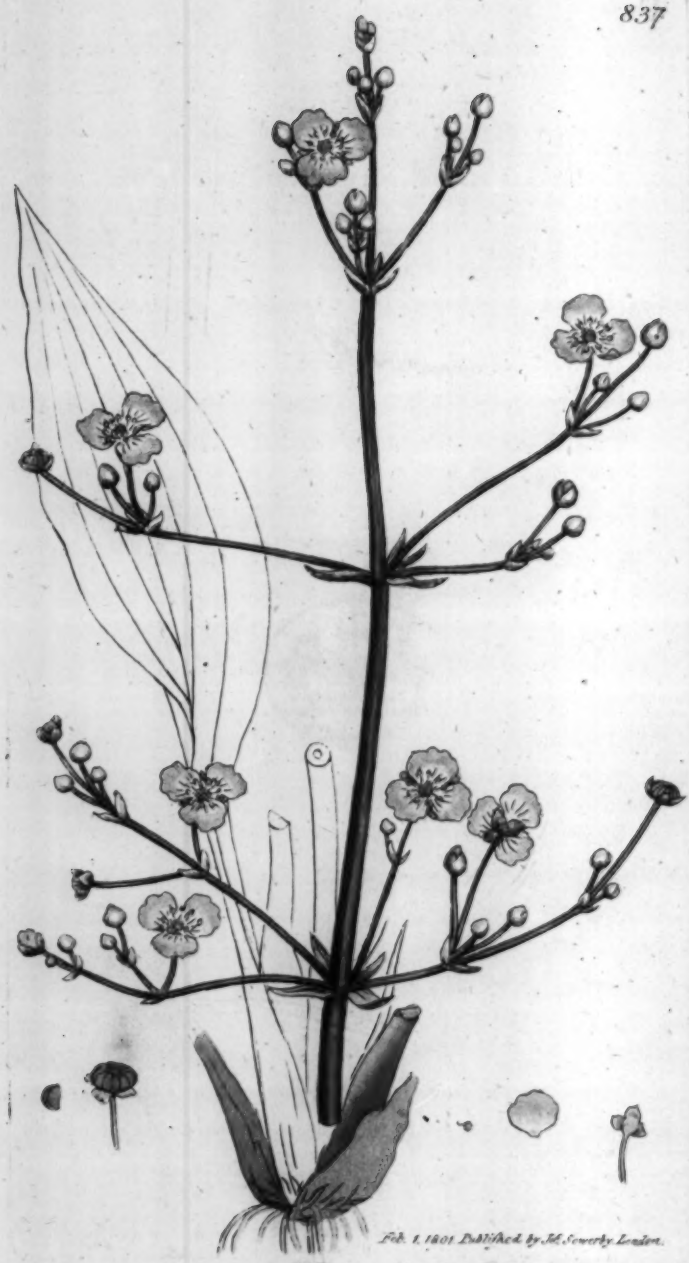
J. lævis vulgaris, paniculâ ſparsâ, noſtras. *Raii Syn.* 432.

EQUALLY common with the laſt in moiſt boggy places, flowering in July.

Root perennial, a little creeping. Stem about the height of *J. conglomeratus*, but of a paler hue, and more ſoft, not at all pungent. Panicle lateral, much branched, looſe and ſpreading, compoſed of a great multitude of pale-green flowers, whoſe calyx-leaves are narrow, pointed, 2-ribbed. Stamina 6, very rarely 3 only. Capſule ſmall, obtuſe, pale-brown.

The pith of this ruſh, as well as of *J. conglomeratus*, is uſed for making wicks to candles that are required to burn without ſnuffing, though not wanted to ſhow a ſtrong light. The ſtems are ſometimes platted into chair-bottoms, baſkets, &c. but are inferior in ſoftneſs and pliability, as well as in length, to the *Scirpus lacuſtris*, *t.* 666.





Feb. 1. 1801. Published by Jas. Sowerby London.

ALISMA Plantago.

Greater Water-Plantain.

HEXANDRIA Polygynia.

GEN. CHAR. *Cal.* of 3 leaves. *Petals* 3. *Capſules* many, aggregate, generally ſingle-ſeeded.

SPEC. CHAR. Leaves ovate, acute. Capſules obtuſely triangular.

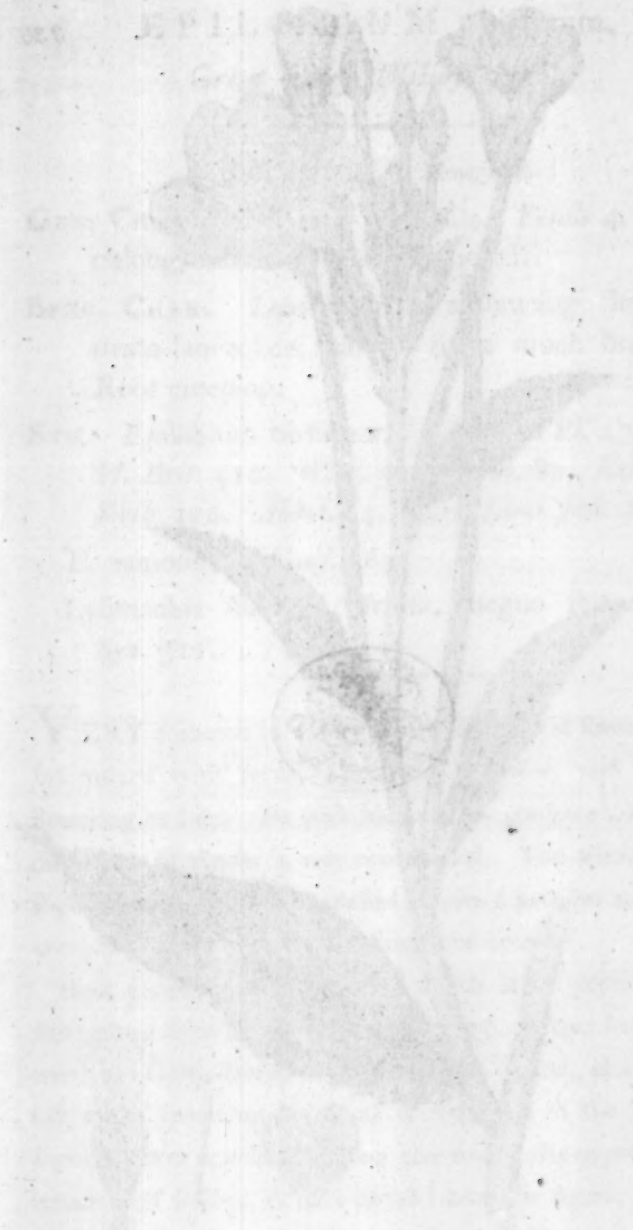
SYN. Aliſma Plantago. *Linn. Sp. Pl.* 486. *Sm. Fl. Brit.* 400. *Hudſ.* 158. *With.* 361. *Hull.* 78. *Relh.* 150. *Sibth.* 120. *Abbot.* 83. *Curt. Lond. faſc.* 5. *t.* 27.

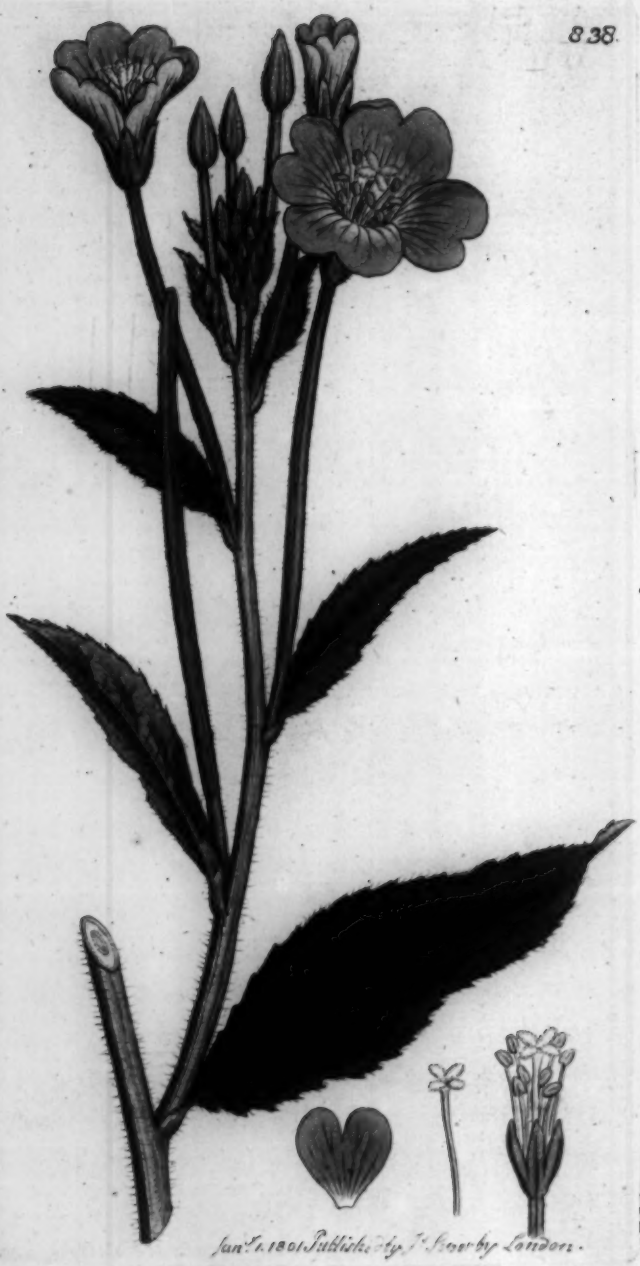
Plantago aquatica. *Raii Syn.* 257.

POOLS and ditches, and ſometimes the borders of ſlow ſtreams, are plentifully adorned with the large branching ſtems and numerous white or purpliſh flowers of the Great Water Plantain in the middle of ſummer.

The root is fibrous and perennial, fixed in the mud under water. Leaves all radical, erect, on long ſtalks, ovate, acute, entire, ribbed, ſmooth, various in ſize and breadth, all ſtanding out of the water. Flower-ſtalk riſing frequently 2 or 3 feet above the ſurface, compoſed of numerous, whorled, compound, ſpreading, bracteated branches. Each flower ſtands on a partial ſtalk, erect, compoſed of three ſhort-lived jagged petals. The germens are compreſſed, three-ſided, ranged in a circle like thoſe of the Mallow tribe, each terminated by a crooked ſtyle. The capſules agree in form and poſition with the germens.

We can find no ſatisfactory reaſons for making the *A. lanceolata* of Withering a diſtinct ſpecies from this, as it ſeems merely a ſmall variety with narrower leaves. Aquatic plants in general are liable to vary in the breadth of their leaves, witneſs the *Sagittaria*, *Ranunculus aquatilis*, and ſome ſpecies of *Potamogeton*.





Jan.ry 1.1801. Published by J. Stone by London.

EPILOBIUM hirſutum.

Great hairy Willow-herb.

OCTANDRIA Monogynia.

GEN. CHAR. *Cal.* in 4 ſegments. *Petals* 4. *Capſ.* oblong, inferior. *Seeds* feathered.

SPEC. CHAR. Leaves partly embracing the ſtem, ovato-lanceolate, hairy. Stem much branched. Root creeping.

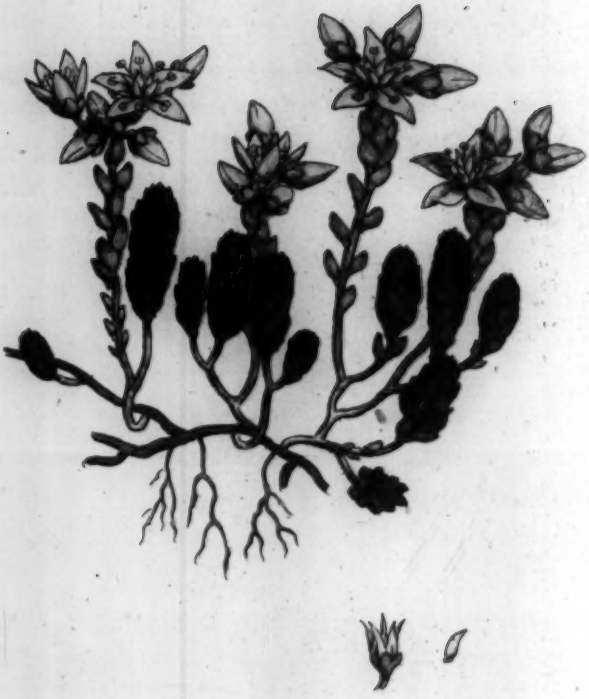
SYN. Epilobium hirſutum. *Linn. Sp. Pl.* 494. *Sm. Fl. Brit.* 410. *With.* 366. *Hull.* 82. *Relh.* 153. *Sibth.* 122. *Abbot.* 84. *Curt. Lond. faſc.* 2. *t.* 21.

E. ramoſum. *Hudſ.* 162.

Lyſimachia ſiliquoſa hirſuta, magno flore. *Raii Syn.* 311.

VERY common in watery places, margins of ſtreams, &c., intermixed with reeds, *Convolvulus ſepium*, and willows, flowering in July. Its pink bloſſoms are conſpicuous at ſome diſtance, and render it very ornamental. The whole herb is ſlightly viſcid, and when touched exhales a peculiar acid ſmell, compared to the flavour of codlings and cream.

Root perennial, creeping, by which it is peculiarly diſtinguiſhed from *E. parviflorum*, *t.* 795. Stems four feet or more in height, leafy, much branched, round, clothed with ſoft white ſpreading hairs, as is every part of the herbage. Lower leaves oppoſite, claſping the ſtem; the uppermoſt alternate and ſeſſile; all of a broad-lanceolate figure, pointed, toothed and veiny. Flowers corymboſe, each accompanied by a ſmall leaf. Petals inverſely heart-ſhaped, regular, twice as long as the calyx. Germen downy, long.



Feb. 1. 1801. Published by Jas. Sowerby, London.

SEDUM acre.

Biting Stone-croſs.

DECANDRIA Pentagynia.

GEN. CHAR. *Cal.* 5-cleft. *Petals* 5, with 5 nectariferous ſcales at the baſe of the germen. *Capſules* 5.

SPEC. CHAR. Leaves alternate, ſomewhat ovate, fleſhy, gibbous, fixed to the ſtem by their inner ſide above the baſe. Cyme three-cleft, leafy.

SYN. Sedum acre. *Linn. Sp. Pl.* 619. *Sm. Fl. Brit.* 487. *Hudſ.* 196. *With.* 427. *Hull.* 99. *Relh.* 174. *Sibth.* 144. *Abbot.* 99. *Curt. Lond. faſc.* 1. *t.* 32. *Woodv. Suppl. t.* 231.

S. parvum acre, flore luteo. *Raii Syn.* 270.

THIS brilliant little flower is conſpicuous enough about midſummer, and for ſome time afterwards, on walls, roofs, and dry barren or ſandy ground, which it clothes as it were with a cloth of gold, in defiance of the drought and moſt ſcorching ſun.

The ſmall fibrous roots are perennial, and ſpring from the lower part of the tufted and intricate ſtems, whoſe branches only grow upright, and are covered with alternate, imbricated, very ſucculent, ſmooth, graſs-green leaves, which are of an ovate form, protuberant at the back, fixed to the ſtem not by their baſe, but by their inner or upper ſurface a little above it, conſequently ſpurred beneath the inſertion, as in *S. reflexum*, *t.* 695. Flowers in ſmall terminal leafy cymes, which are three-cleft when luxuriant only. Calyx of five bluntiſh ſmooth ſegments. Petals ovate, acute. Capſules membranous, pointed, ſmooth.

The whole herb is acrid, hot and biting to the taſte, whence its common name Wall Pepper. Dr. Woodville quotes ſeveral authorities to prove its uſe in ſcorbutic and ſcrophulous diſorders.

Feb. 1. 1801. Published by Jas. Sowerby, London.

EUPHORBIA Cypariſſias.

Cypreſs Spurge.

DODECANDRIA Trigynia.

GEN. CHAR. *Cal.* of one leaf, inflated, inferior. *Nectaries* 4 or 5, ſtanding on the calyx. *Capſule* ſtalked, 3-lobed.

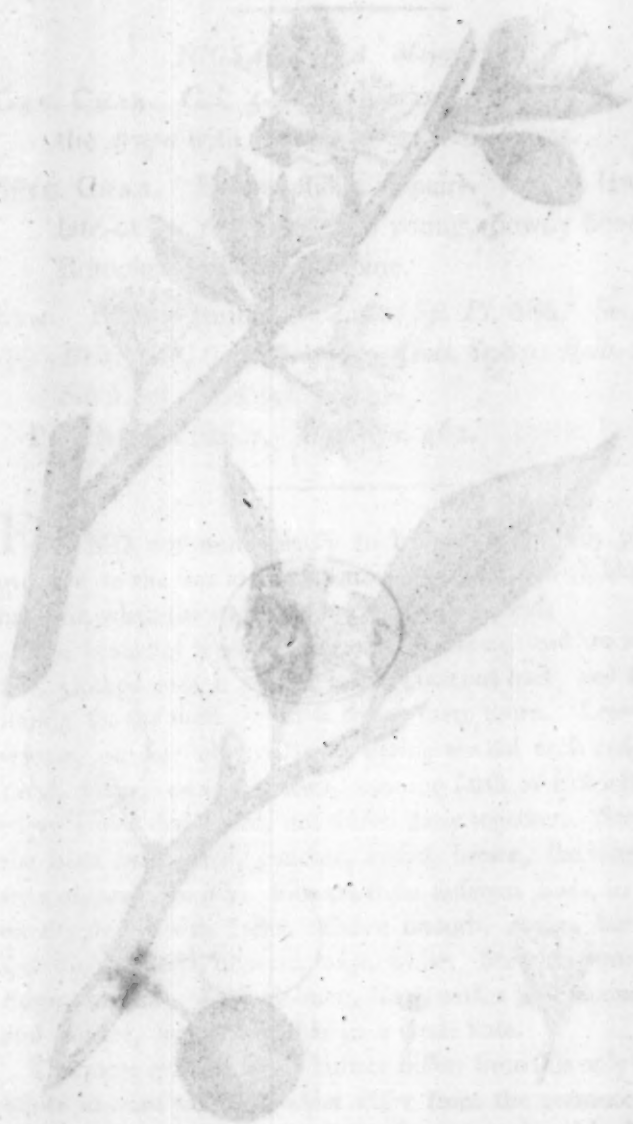
SPEC. CHAR. Umbel of many dichotomous rays. Partial involucra ſomewhat heart-ſhaped. Stem-leaves lanceolate; thoſe on the ſide branches very narrow.

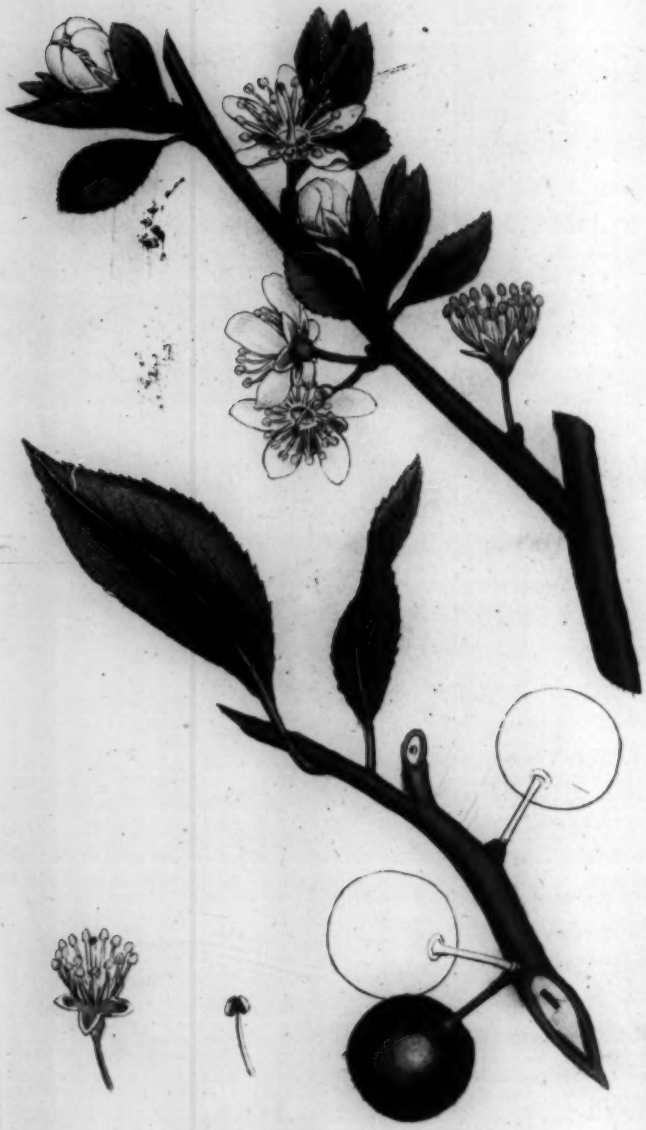
SYN. Euphorbia Cypariſſias. *Linn. Sp. Pl.* 661. *Sm. Fl. Brit.* 519. *With.* 451. *Sym.* 117. *Hull.* 106.

THIS *Euphorbia* was firſt introduced to the knowledge of the Britiſh botaniſt by Dr. Withering, who mentions it as growing wild in Lord Stamford's woods in Staffordſhire. Our ſpecimen confirms his aſſertion, having been gathered by the Rev. Mr. Abbot in Barton Leat Wood, Bedfordſhire, in Auguſt 1799.

The root creeps to a conſiderable extent, but not very rapidly. Stems about a foot high, round, ſmooth, leafy, furniſhed with ſeveral alternate, upright, lateral, very leafy branches. Leaves entire, linear, ſcattered; thoſe on the main ſtem broader and almoſt lanceolate; the reſt very narrow, almoſt ſetaceous. Umbel of from 7 to 15 rays, which are forked repeatedly, and a few ſhorter axillary rays are ſcattered down the ſtem, as in many other ſpecies. General involucra of ſeveral broad lanceolate leaves; partial of broader yelloviſh ſmooth heart-ſhaped ones. Nectaries four, yellow, creſcent-ſhaped, a little pointed. Capſule ſmooth; Roth in his excellent *Flora Germanica* mentions it as being ſometimes tuberculated.

The involucella, and even the leaves, frequently aſſume a bright ſaffron or vermilion hue in autumn, exactly like that of the wild Box-tree, a plant of the ſame natural order.





Feb. 1. 1801. Published by Jas. Sowerby, London.

PRUNUS inſititia.

Wild Bullace-tree.

ICOSANDRIA Monogynia.

GEN. CHAR. *Cal.* 5-cleft, inferior. *Pet.* 5. *Stone* of the *drupa* with ſlightly prominent ſeams.

SPEC. CHAR. Flower-ſtalks in pairs. Leaves lanceolate-ovate, revolute when young, downy beneath. Branches ending in a ſpine.

SYN. Prunus inſititia. *Linn. Sp. Pl.* 680. *Sm. Fl. Brit.* 528. *With.* 456. *Hull.* 108. *Relh.* 188. *Sibth.* 154. *Abbot.* 107.

P. ſylveſtris major. *Raii Syn.* 462.

FOUND not unfrequently in hedges and woody places, growing to the ſize of a ſmall tree, and covered with bloſſoms in April, when the leaves are beginning to expand.

The branches ſpread in various directions, and are round, ſtiff, clothed with a reddiſh rather glaucous bark, and terminating for the moſt part in a ſtrong ſharp thorn. Leaves alternate, on footſtalks, ovate, tapering toward each end, ſerrated, veiny, downy beneath, coming forth at firſt with the edges coiled backward, not folded flatly together. Scales of the buds imbricated, concave, entire, brown, the innermoſt fringed, and greeniſh. Flowers from different buds, in pairs, on ſimple ſhortiſh ſtalks. Calyx ſmooth, entire, but little ſpreading. Petals obovate, large, white. Stamina numerous. Stigma capitate. Fruit globular, black with a blue bloom, ſour and auſtere, ſcarcely eatable in a crude ſtate.

The more grateful white bullace differs from this only as the white currant or white elder differ from the common wild kinds of each. The red auſtere plum, mentioned by Ray as growing in Eſſex, muſt have been either a variety of this, or ſome ſtray plant of the garden *P. domeſtica.*

Feb. 1. 1801. Published by Jas. Sowerby, London.

PRUNUS ſpinoſa.

Sloe-tree, or Black-thorn.

ICOSANDRIA Monogynia.

GEN. CHAR. *Cal.* 5-cleft, inferior. *Pet.* 5. *Stone* of the *drupa* with ſlightly prominent ſeams.

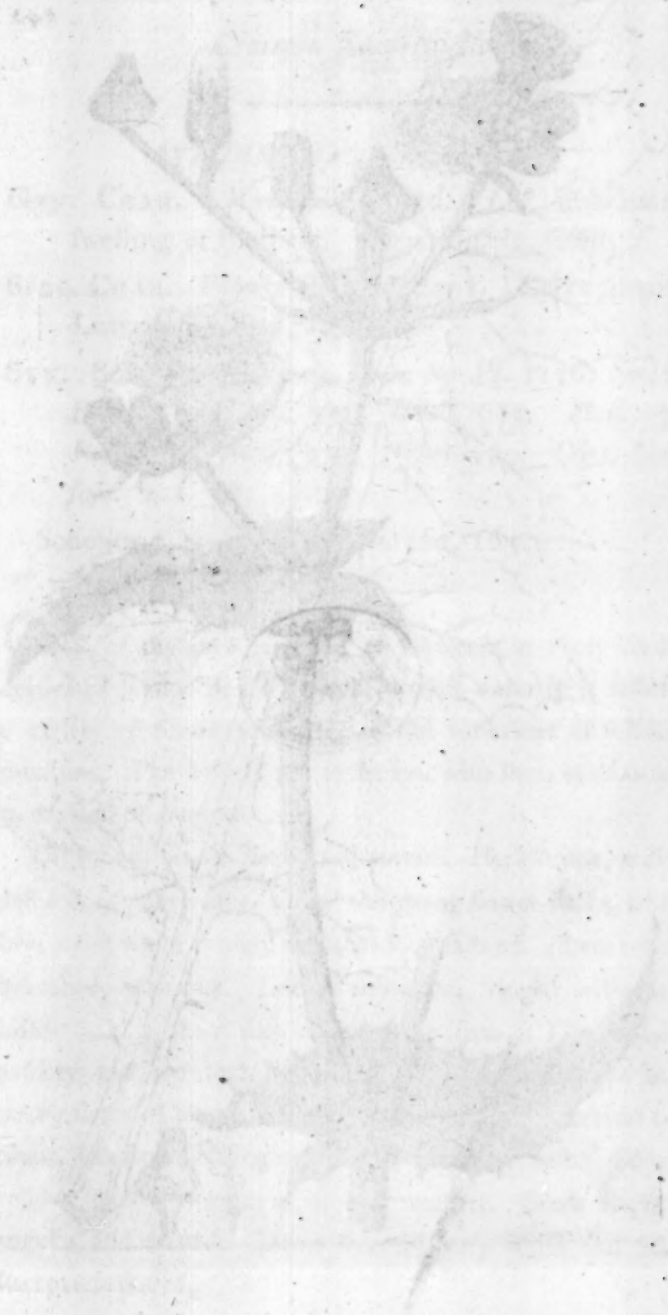
SPEC. CHAR. Flower-ſtalks ſolitary. Leaves lanceolate, ſmooth. Branches ending in a ſpine.

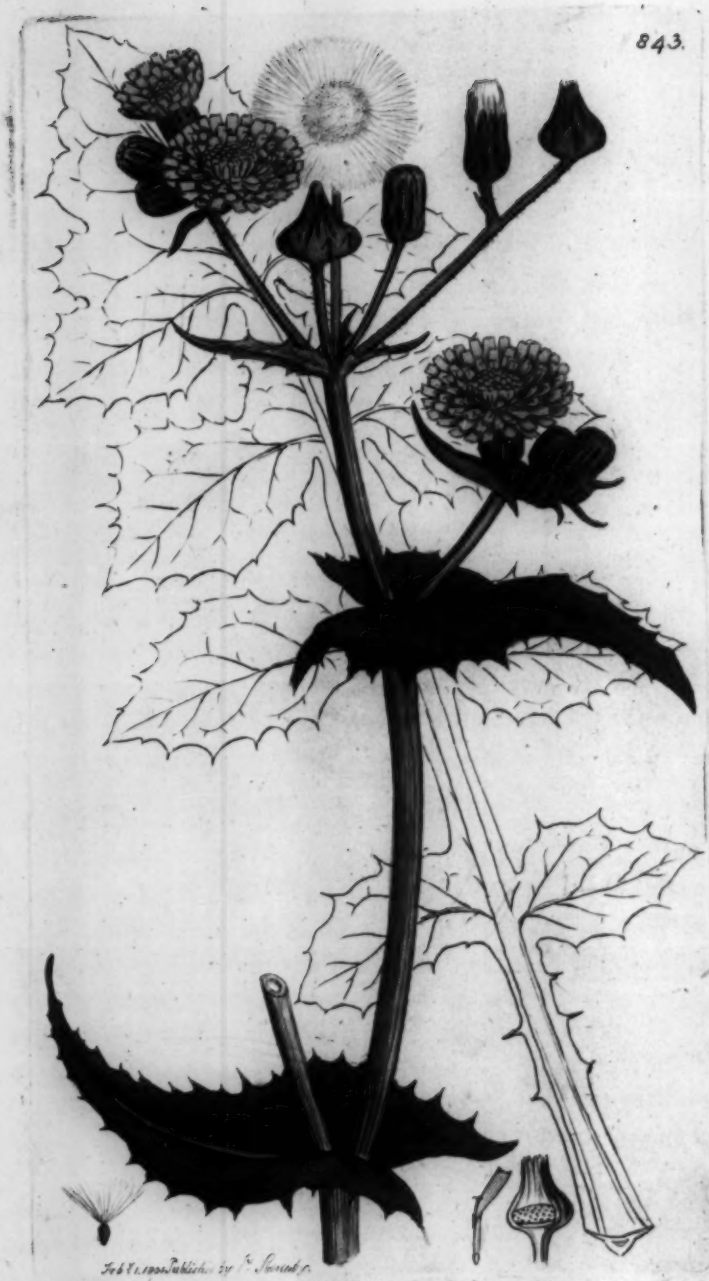
SYN. Prunus ſpinoſa. *Linn. Sp. Pl.* 681. *Sm. Fl. Brit.* 528. *Hudſ.* 212. *With.* 457. *Hull.* 108. *Relh.* 189. *Sibth.* 155. *Abbot.* 108. *Woodv. Med. Bot. t.* 84.

P. ſylveſtris. *Raii Syn.* 462.

COMMON in every hedge and thicket, where its bloſſoms are very conſpicuous in March or April, and are one of the earlieſt harbingers of ſpring. They generally cover the branches in great profuſion before any leaves appear.

This ſhrub is naturally low and depreſſed, formed of ſpreading hard rigid and thorny branches, clothed with a black rather glaucous bark. Leaves on ſtalks, lanceolate, or inverſely ovate, (at leaſt the earlier ones), ſerrated, ſmooth, dark-green. Scales of the buds much like thoſe of the laſt. Flowers ſolitary, each on a ſhort ſtalk, from a ſmall bud at the baſe of each leaf-bud. Calyx ſpreading. Petals white, roundiſh. Fruit globular, black, very auſtere and not eatable raw, though it may be made palatable by being prepared with a great quantity of ſugar. Its expreſſed juice inſpiſſated over a ſlow fire is a ſubſtitute for the Egyptian Acacia, and not an unuſeful aſtringent medicine. The recent fruit is one of the many articles uſed to adulterate port wine in England. The dried leaves are ſaid to be a ſubſtitute for tea, and are perhaps often mixed with it in this country. They may be one cauſe of its proving ſometimes pernicious; for the green parts of all the plum and cherry tribe are highly poiſonous, and it is fortunate if they act merely as a purgative.





Feb 1. 1803. Published by J. Sowerby.

SONCHUS oleraceus.

Common Sow-thiſtle.

SYNGENESIA Polygamia-æqualis.

GEN. CHAR. *Receptacle* naked. *Cal.* imbricated, ſwelling at the baſe. *Down* ſimple, ſeſſile.

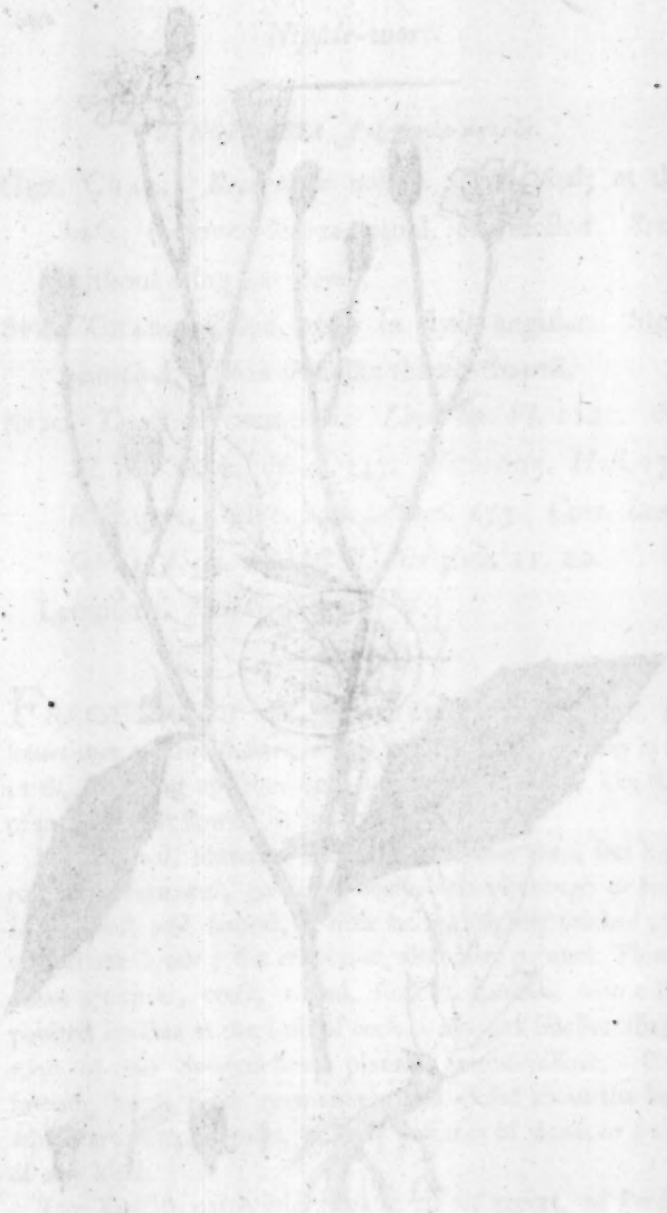
SPEC. CHAR. Flower-ſtalks cottony. Calyx ſmooth. Leaves runcinate, toothed.

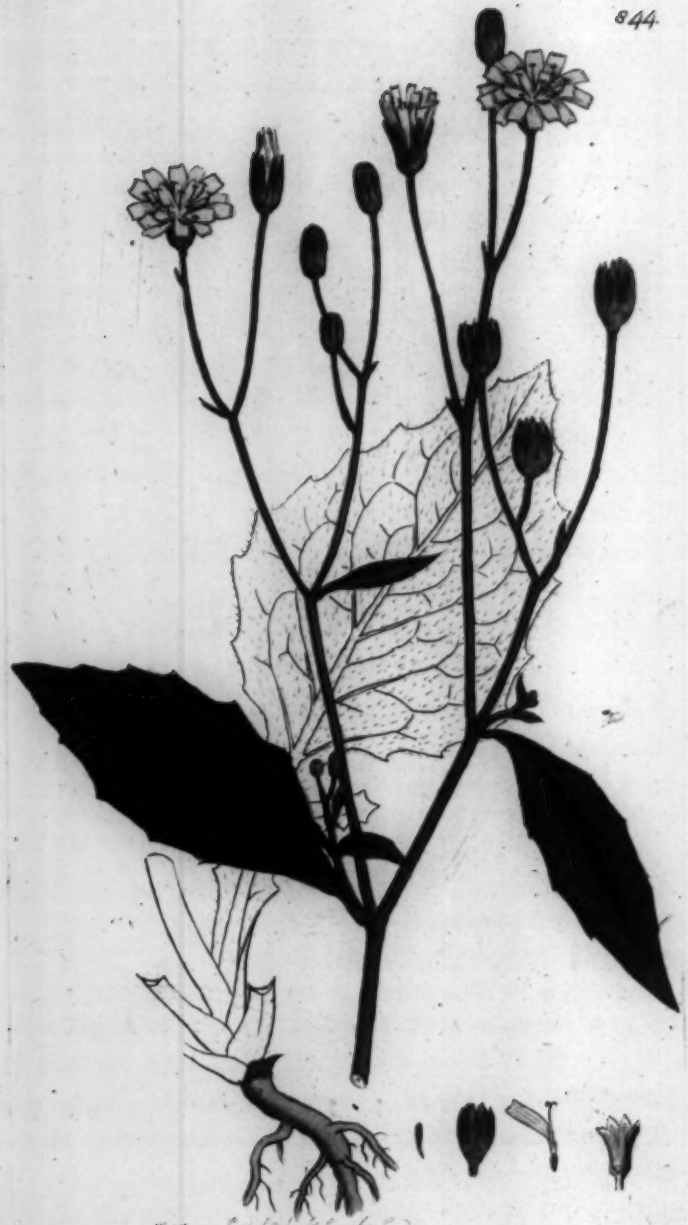
SYN. Sonchus oleraceus. *Linn. Sp. Pl.* 1116. *Sm. Fl. Brit.* 818. *Hudſ.* 336. *With.* 675. *Hull.* 177: *Relh.* 291. *Sibth.* 237. *Abbot.* 169. *Curt. Lond. faſc.* 2. *t.* 58.

Sonchus n. 1—6. *Raii Syn.* 162, 163.

ONE of the moſt common of all weeds in every kind of cultivated land; and like ſuch vagrant annuals it aſſumes a variety of forms according to the variations of ſoil and moiſture. The flowers are to be met with from midſummer to the end of autumn.

The root is ſpindle-ſhaped and annual. Herb brittle, milky, deſtitute of pubeſcence, except the young flower-ſtalks, which bear a ſoft white cottony web that ſoon falls off. Stem round, branched, glaucous. Leaves runcinate, fringed with little briſtly teeth; their baſe claſping the ſtem. Flower-ſtalks axillary and terminal, forming cymes, ſmooth except in a young ſtate. Calyx ſmooth, glaucous, at firſt cylindrical and blunt, but ſoon ſwelling out very much at the baſe. Corolla yellow, cloſed at night or in bad weather. Seeds obovate, angular and ſtriated. Down ſmooth, very white and ſilky. Receptacle dotted.





Published by S. Sowerby, London.

LAPSANA communis.

Nipple-wort.

SYNGENESIA Polygamia-æqualis.

GEN. CHAR. *Receptacle* naked. *Cal.* ſcaly at the baſe; its inner leaves equal, channelled. *Seeds* without wing or down.

SPEC. CHAR. Calyx when in fruit angular. Stem panicled. Flower-ſtalks thread-ſhaped.

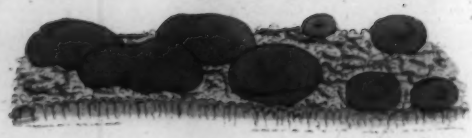
SYN. Lapſana communis. *Linn. Sp. Pl.* 1141. *Sm. Fl. Brit.* 842. *Hudſ.* 347. *With.* 693. *Hull.* 178. *Relh.* 301. *Sibth.* 242. *Abbot.* 173. *Curt. Lond. faſc.* 1. *t.* 59. *Dickſ. H. Sicc. faſc.* 11, 12.

Lampſana. *Raii Syn.* 173.

FREQUENT in waſte as well as cultivated ground, and ſometimes a troubleſome weed, as the ſeeds lie long in the earth, ſpringing up from time to time occaſionally, like thoſe of poppies. It flowers in June or July.

Root annual, fibrous. Stem upright, near three feet high, roundiſh, furrowed, panicled, leafy, ſcarcely rough or hairy. Leaves ſoft and flaccid, a little hairy, ſlightly toothed; the radical ones lyrate; the reſt ovate, alternate, pointed. Flower-ſtalks alternate, erect, round, ſlender, ſmooth, with a little pointed bractea at the baſe of each. Flowers ſmaller than in moſt of our Syngeneſious plants, bright-yellow. Calyx ſmooth, hard, rigid, permanent, and cloſed about the ſeeds, which are few, angular, entirely deſtitute of down or feather of any kind.

The Engliſh name originates in an old report, of Pruſſian origin and perhaps little to be truſted, that the herb cures ſore breaſts. See Gerarde's Herbal.



Pub. 1. 1801. Published by Jas. Sowerby, London.

LICHEN vernalis.

Vernal Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, ſcattered warts.

Female, ſmooth ſhields or tubercles in which the ſeeds are imbedded.

SPEC. CHAR. Cruſt thin, powdery, whitiſh-green. Shields at length almoſt globoſe, cluſtered, of a brown or ruſty fleſh-colour.

SYN. Lichen vernalis. *Linn. Syſt. Nat. ed.* 12. *v.* 3. 234. *Achar. Prod.* 51. *Lightf.* 805. *With. v.* 4. 14. *Hull.* 288. *Relh.* 423.

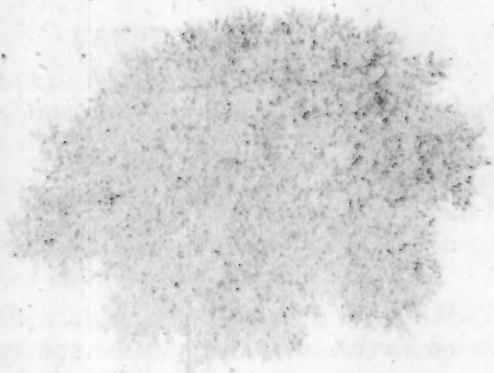
L. ſphæroides. *Dickſ. Crypt. faſc.* 1. 9. *t.* 2. *f.* 2. *With. v.* 4. 15. *Hull.* 288.

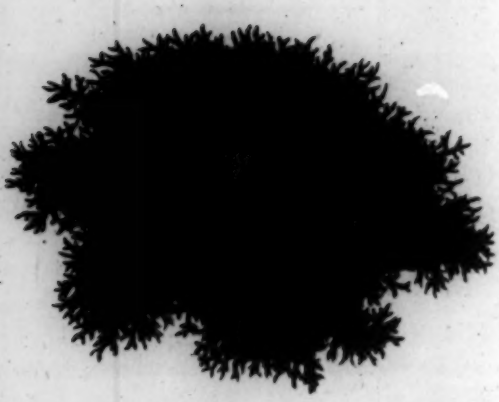
Verrucaria rubella. *Hoffm. Fl. Germ. v.* 2. 174.

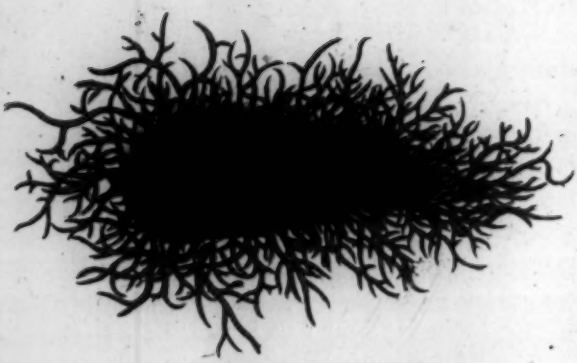
NOT unfrequent on the barks of trees, or on moſſes in low damp places.

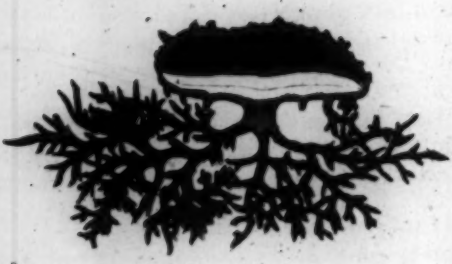
The cruſt is irregular, thin, powdery or granulated, of a pale dull olive hue, whiter when dry. Shields when very young flattiſh, with a thick border of their own colour, which however is ſoon obliterated, and the diſk becomes very convex, almoſt globoſe, often lobed, generally of a pale ruſty hue, verging towards a fleſh-colour, but more frequently of the colour of yellow ochre, and often brown. Theſe tubercles (for ſo they are in a full grown ſtate) are of different magnitudes, to the ſize of a moderate pin's head, and variouſly cluſtered together.

Mr. Hudſon has cauſed great confuſion by tranſcribing the Linnæan character of this *Lichen* for his *ferrugineus*, which is a very different ſpecies, the *crenularius* of Withering, and figured twice by Hoffmann, *Pl. Lich. t.* 12. *f.* 1, and *t.* 35. *f.* 1. We cannot but agree with Dr. Acharius, that Mr. Dickſon's *L. ſphæroides* is merely a variety of *vernalis* with rather more protuberant ſhields; and indeed Mr. D. Turner and myſelf had, from the conſideration of ſeveral original ſpecimens, previouſly formed the ſame concluſion, and fixed the above ſynonyms.









Published by J.T. Sowerby London.

LICHEN lanatus.

Black Woolly Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, ſcattered warts.
Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

SPEC. CHAR. Shrubby, filamentous, much branched, intricate, round, ſolid, ſmoothiſh, browniſh black. Shields of the ſame colour, flat, with an irregularly toothed margin.

SYN. Lichen lanatus. *Linn. Sp. Pl.* 1623. *Hudſ.* 562. *Lightf.* 892. *Achar. Prod.* 216. *Schrad. Spicil.* 100. *t.* 1. *f.* 6.

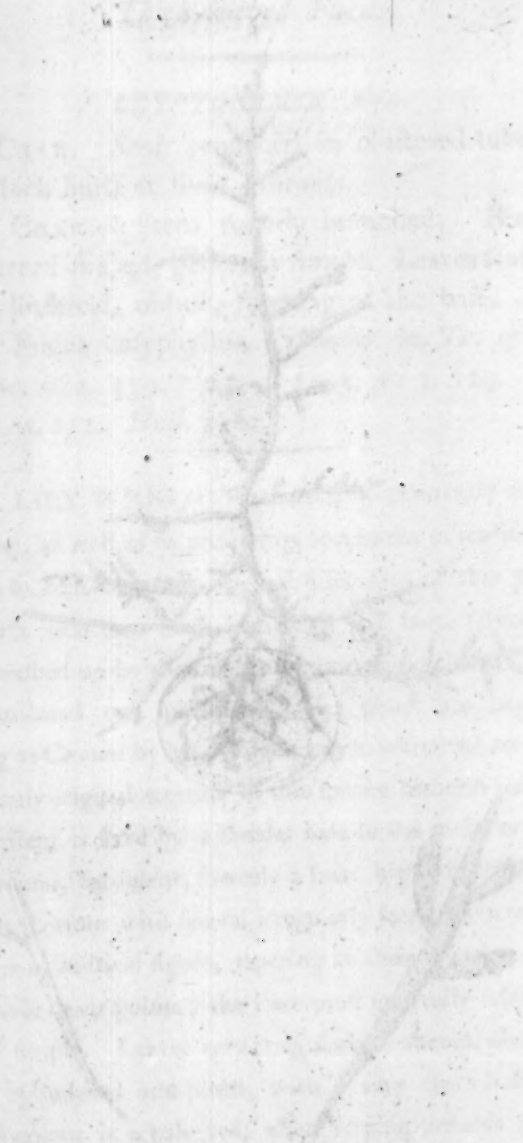
L. pubeſcens. *Hudſ.* 562. *Lightf.* 893.

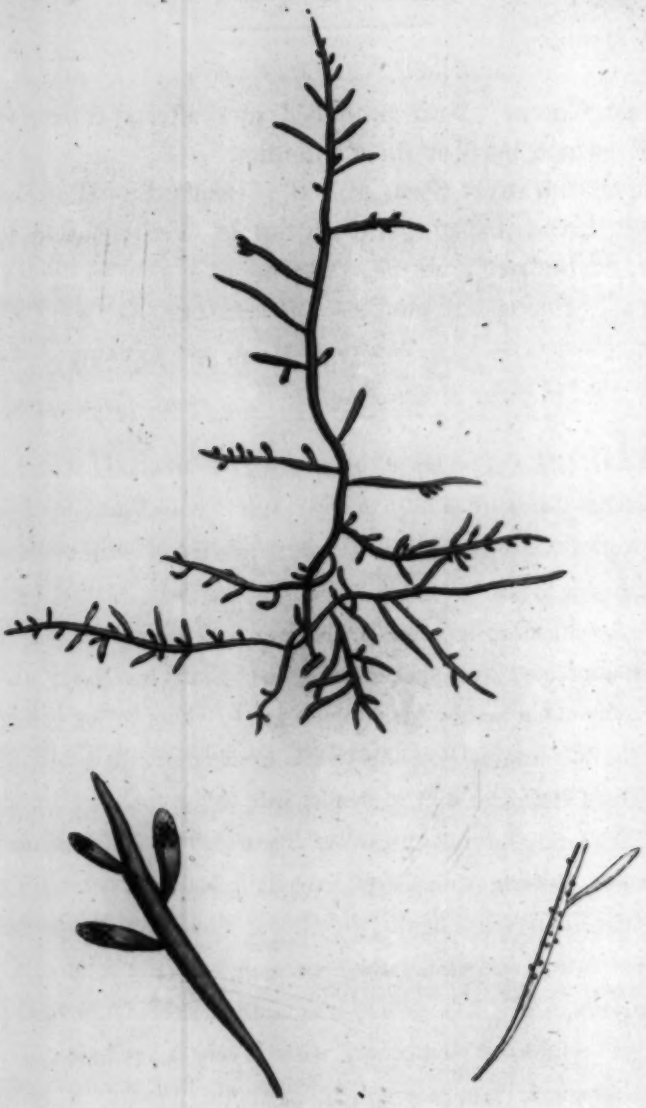
Uſnea lanæ nigræ inſtar ſaxis adhærens. *Dill. Muſc.* 66. *t.* 13. *f.* 8. et U. cæſpitoſa exilis capillacea atra. *ib. f.* 9. etiam Coralloides tenuiſſimum nigricans, mundi muliebris inſtar textum. *Fjuſd.* 113. *t.* 17. *f.* 32.

Muſcus coralloides, lanæ nigræ inſtar ſaxis adhærens. *Dill. in Raii Syn.* 65.

A NATIVE of the high micaceous mountains of Scotland and the north of England. It grows in denſe elaſtic patches creeping over the rocks. The ſtem and branches are very intricate, repeatedly ſubdivided, unequal, roundiſh, ſolid, more or leſs poliſhed, of a dark olive brown, almoſt black, eſpecially when dry. Shields rarely produced, (ſent us by Mr. J. Mackay,) a little elevated, irregular, flattiſh, poliſhed, rather blacker than the frond, ſurrounded with an unequally toothed or ſpinous margin.

It is quite diſtinct from the *L. chalybeiformis*, and belongs indeed to a different family of the genus. When deſtitute of fructification it is larger, more luxuriant, and ſomewhat paler, and is then the *lanatus* of moſt authors; when in a fruit-bearing ſtate, as in our figure, it is ſmaller, and generally taken for *pubeſcens*; but we readily agree with Dr. Acharius that the real *pubeſcens* (of *Fl. Suecica* at leaſt) is Lightfoot's *exilis*, and, we beg leave to add, the *ſcaber* of Hudſon.





March 1. 1801. Published by Jas. Sowerby, London.

FUCUS daſyphyllus.

Thick-leaved Fucus.

CRYPTOGAMIA Algæ.

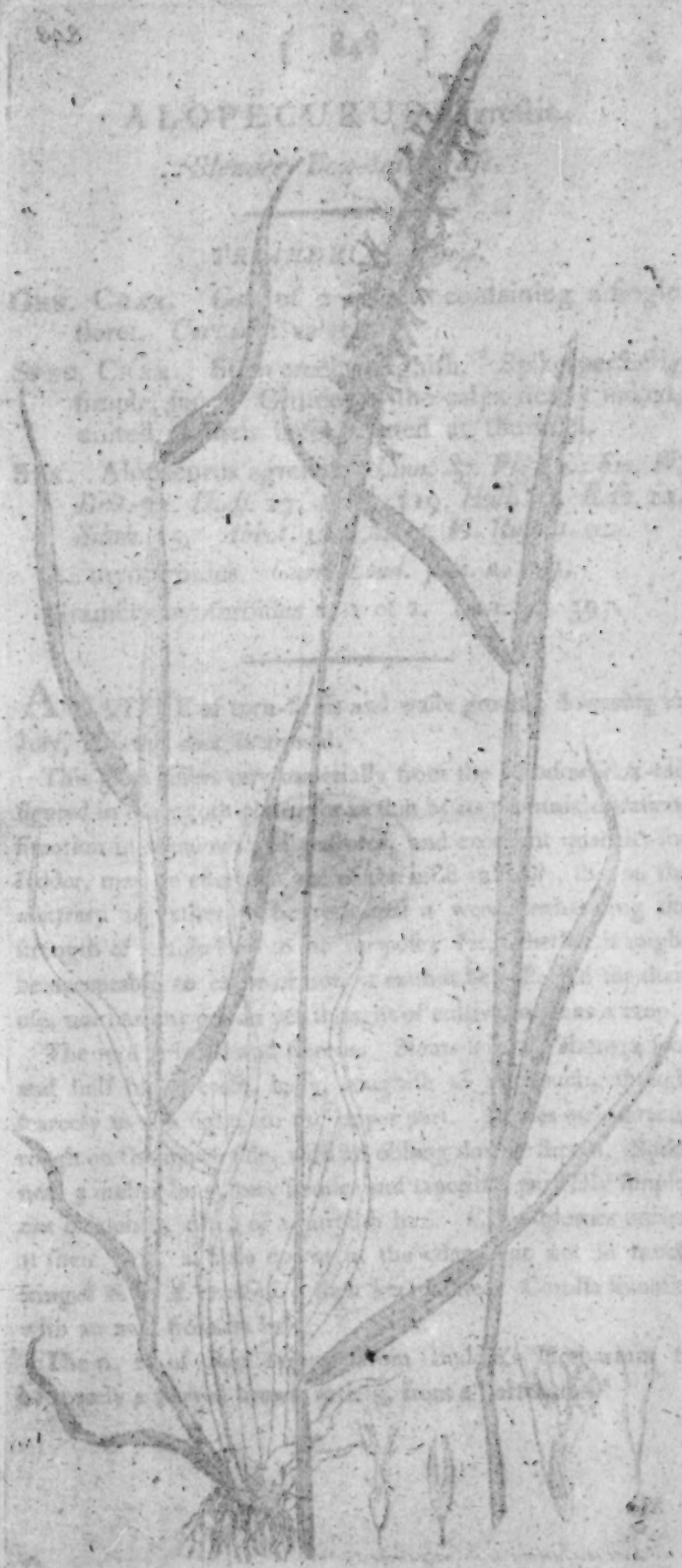
GEN. CHAR. *Seeds* produced in cluſtered tubercles, which burſt at their ſummits.

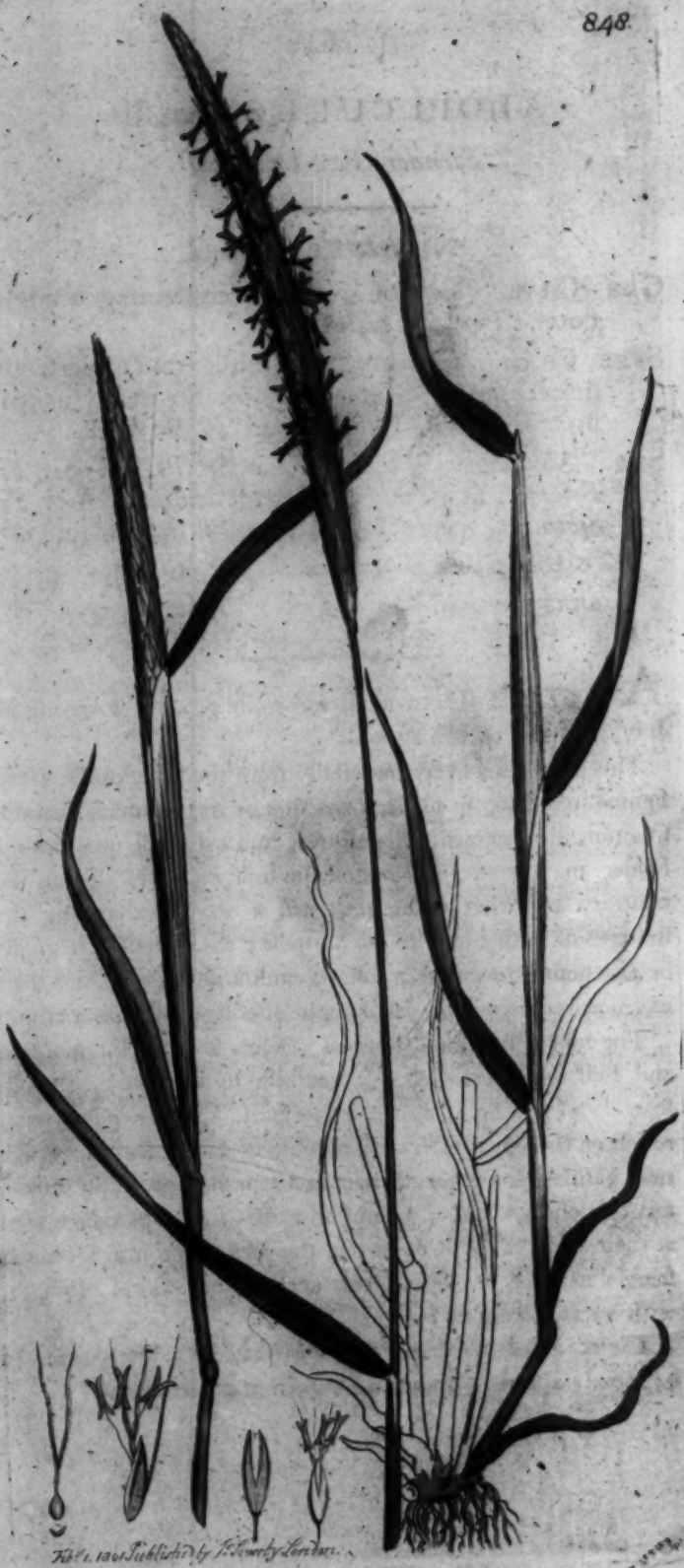
SPEC. CHAR. Stem round, branched. Branches thread-ſhaped, generally ſimple. Leaves ſcattered, cylindrical, obtuſe, tapering at the baſe.

SYN. Fucus daſyphyllus. *Woodw. in. Tr. of Linn. Soc. v.* 2. 239. *t.* 23. *f.* 1—3. *v.* 3. 119. *With. v.* 4. 112. *Hull.* 316.

MR. LILY WIGG of Yarmouth, ſo eminently ſkilful in detecting, as well as in preſerving, ſpecimens of marine *algæ*, appears to have been the original diſcoverer of this plant on the beach near that town, where it has been ſeveral times found waſhed up by the tide, and from whence Mr. D. Turner communicated our ſpecimen. The plant has been ſeen growing at Cromer by Mr. Woodward, to whom we are obliged for the only original accounts of this ſpecies hitherto publiſhed.

The ſtem is fixed by a ſlender baſe to the rocks or ſtones, and is round, ſucculent, ſcarcely a ſpan high, furniſhed from the very bottom with ſeveral irregularly ſcattered branches of the ſame cylindrical figure, tapering at their inſertion as well as towards their points; the lowermoſt generally ſubdivided; the reſt ſimple. Leaves very irregularly ſcattered, obovate, or rather cylindrical and blunt, with a very taper baſe. The general colour is a pale red, often verging towards a green. The fructification conſiſts of dark-red cluſters of ſeeds, either ſcattered over the branches, as in Mr. Woodward's figure, or lodged toward the extremities of the leaves, as in ours.





Feb.1.1801 Published by J.Sowerby London.

ALOPECURUS agreſtis.

Slender Fox-tail-graſs.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 2 valves, containing a ſingle floret. *Cor.* of 1 valve.

SPEC. CHAR. Stem erect, roughiſh. Spike perfectly ſimple, taper. Glumes of the calyx nearly naked, united at their baſe, dilated at the keel.

SYN. Alopecurus agreſtis. *Linn. Sp. Pl.* 89. *Sm. Fl. Brit.* 73. *Hudſ.* 27. *With.* 119. *Hull.* 16. *Relh.* 24. *Sibth.* 35. *Abbot.* 12. *Mart. Fl. Ruſt. t.* 22.

A. myoſuroides. *Curt. Lond. faſc.* 2. *t.* 7.

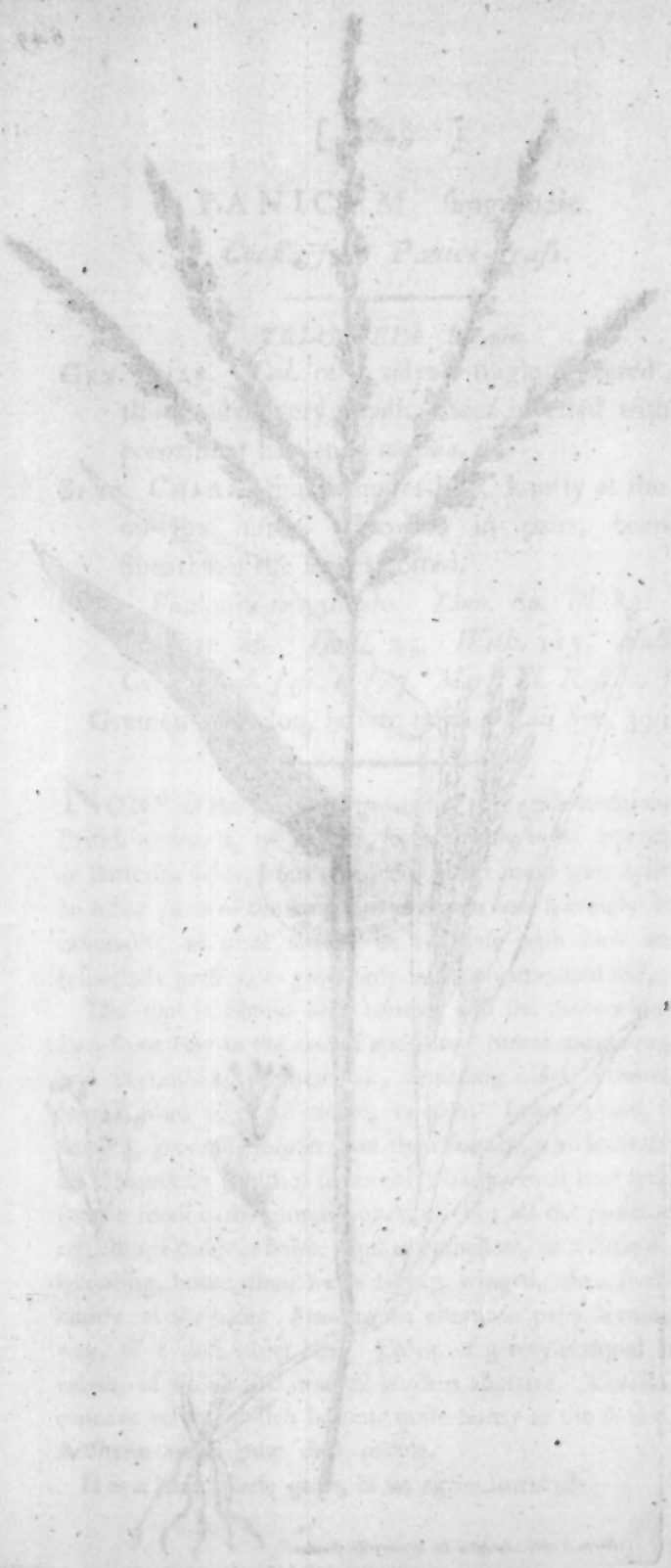
Gramen myoſuroides n. 1 et 2. *Raii Syn.* 397.

A NATIVE of corn-fields and waſte ground, flowering in July, and the root is annual.

This graſs differs very materially from the Meadow Fox-tail figured in our 759th plate; for as that by its perennial duration, ſituation in meadows and paſtures, and excellent qualities for fodder, may be eſteemed one of the moſt valuable, this on the contrary is rather to be reckoned a weed, exhauſting the ſtrength of arable land to no purpoſe; for, whether it might be acceptable to cattle or not, it cannot be collected for their uſe, nor has any perſon yet thought of cultivating it as a crop.

The root is ſmall and fibrous. Stems ſeveral, about a foot and half high, erect, leafy, roughiſh to the touch, though ſcarcely to the ſight, in the upper part. Leaves pale-green, rough on the upper ſide, with an oblong downy ſtipula. Spike near 3 inches long, very ſlender and tapering, perfectly ſimple, not branched, often of a purpliſh hue. Calyx-glumes united at their baſe, a little downy at the edge, but not ſo much fringed as in *A. pratenſis*; their keel dilated. Corolla ſmooth, with an awn from its baſe.

The n. 2. of Ray appears from Buddle's Herbarium to be merely a ſtarved brown variety, from a barren ſoil.



March 1. 1801. Published by Jas Sowerby, London.

PANICUM ſanguinale.

Cock's-foot Panick-graſs.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 3 valves, ſingle-flowered; the third valve very ſmall. *Seed* inveſted with the permanent hardened corolla.

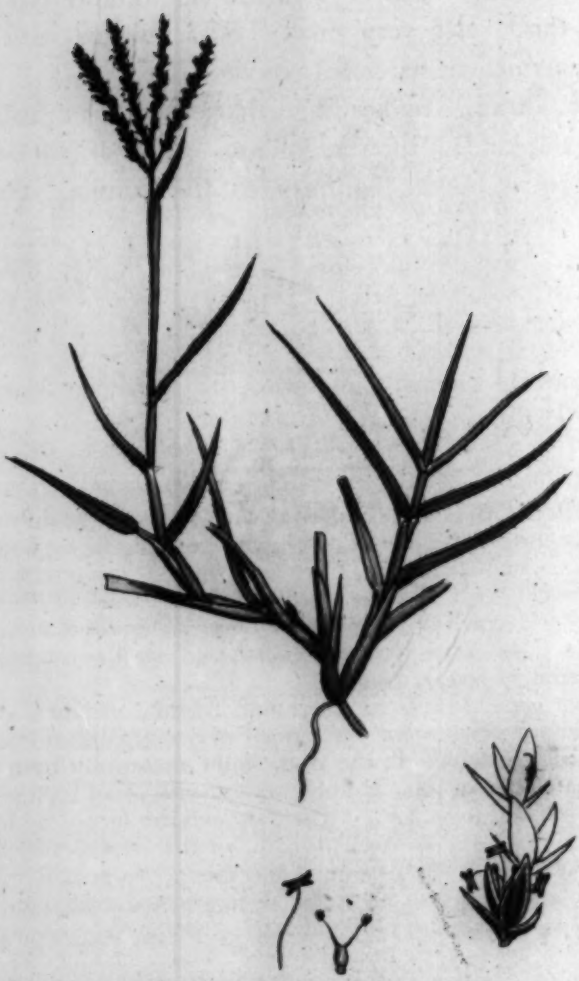
SPEC. CHAR. Spikes finger-like, knotty at the baſe on the inſide. Flowers in pairs, beardleſs. Sheaths of the leaves dotted.

SYN. Panicum ſanguinale. *Linn. Sp. Pl.* 84. *Sm. Fl. Brit.* 66. *Hudſ.* 25. *With.* 115. *Hull.* 15. *Curt. Lond. faſc.* 4. *t.* 7. *Mart. Fl. Ruſt. t.* 78.
Gramen dactylon, latiore folio. *Raii Syn.* 399.

NONE of the places of growth of this graſs mentioned by Britiſh writers is, we believe, ſo conſtantly to be depended on as Batterſea fields, from whence our ſpecimens were collected. In other parts of the kingdom it occurs but ſparingly or occaſionally, as muſt always be the caſe with ſuch annuals (eſpecially graſſes) as grow only in a rich manured ſoil.

The root is fibrous and annual, and the flowers are to be ſeen from July to the end of autumn. Stems numerous, bent and decumbent at their baſe, ſpreading widely upwards, in length from 12 to 18 inches, ſmooth. Leaves broad, nearly ſmooth, generally ſhorter than their ſheaths, which are ſtriated, and frequently (but not invariably) hairy, each hair ſpringing from a ſmall cartilaginous puncture, but all the punctures do not always produce hairs. Spikes umbellate, or a little diſtant, ſpreading, linear, their ſtalks zigzag, winged, often ſwelled or knotty at the baſe. Flowers in alternate pairs leaning one way, of a dull violet hue. Calyx of 3 very unequal ribbed valves, of which the ſmalleſt is often abortive. Corolla of 2 concave valves, which become quite horny as the ſeed ripens. Antheræ and ſtigmas dark-purple.

It is a hard coarſe graſs, of no agricultural uſe.



March 1st 1801. Published by Jas Sowerby, London.

PANICUM dactylon.

Creeping Panick-graſs.

TRIANDRIA Digynia.

GEN. CHAR. *Cal.* of 3 valves, ſingle-flowered; the third valve very ſmall. *Seed* inveſted with the permanent hardened corolla.

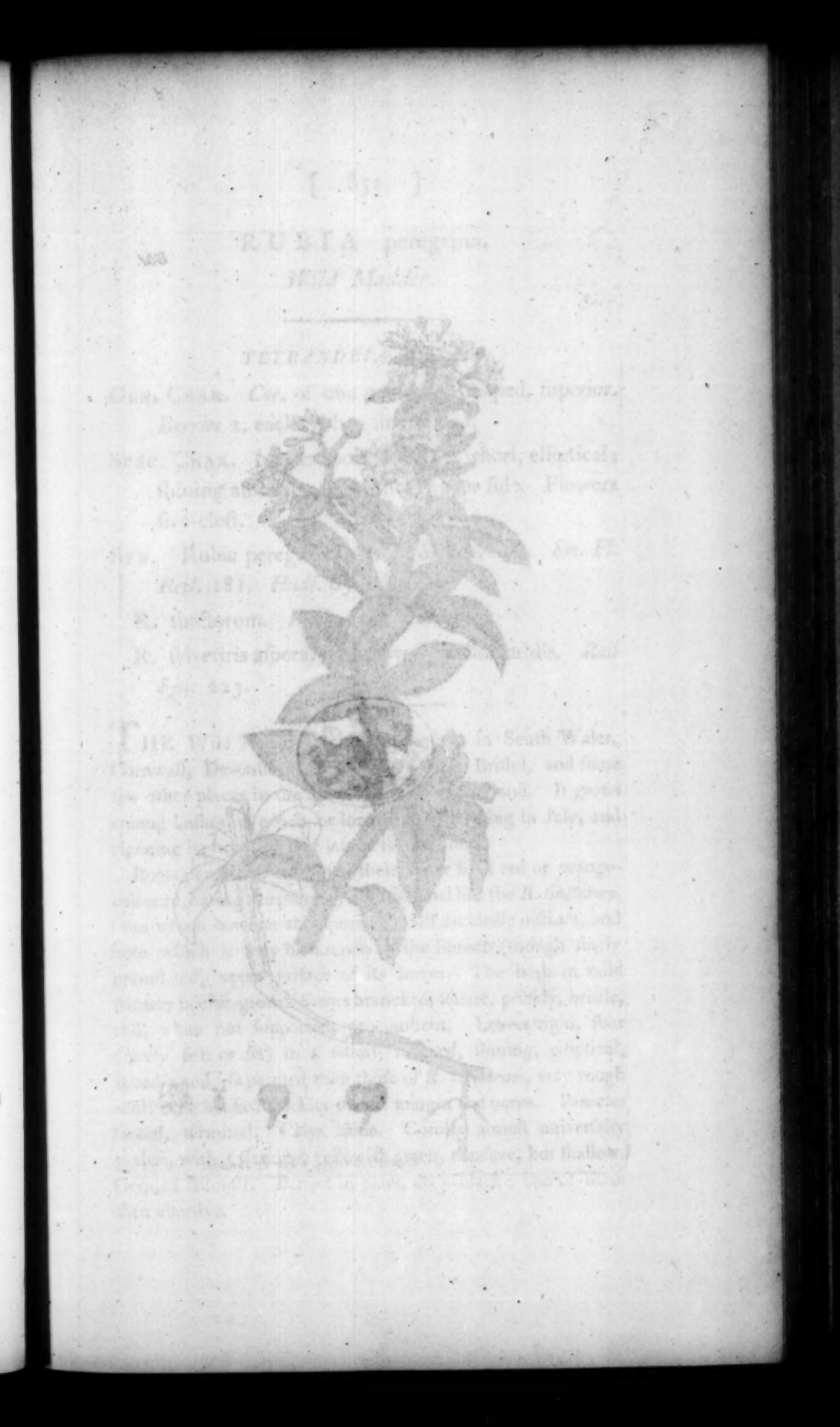
SPEC. CHAR. Spikes finger-like, hairy at the baſe on the inſide. Flowers ſolitary. Calyx of two nearly equal valves, contrary to the corolla. Shoots creeping.

SYN. Panicum dactylon. *Linn. Sp. Pl.* 85. *Sm. Fl. Brit.* 67. *Hudſ.* 25. *With.* 116. *t.* 21. *Hull.* 15. *Dickſ. Dr. Pl.* 53. *H. Sicc. faſc.* 11. 1.

Gramen repens, cum paniculâ graminis Mannæ. *Raii Syn.* 399.

MR. NEWTON is handed down by Ray as the diſcoverer of this curious ſpecies of *Panicum* on the ſandy ſhores between Penſance and Marketjeu, Cornwall, where it has grown copiouſly ever ſince. We are indebted to Dr. Pennick of Penſance for wild ſpecimens. It has never been obſerved in any other part of Great Britain. In the north of Italy it is common in the ſtreets of ſeveral towns.

This graſs flowers in July and Auguſt, or later. The ſtrong perennial roots are formed of hard poliſhed runners ſituated horizontally in the ſand, and throwing out from each joint a cluſter of ſmooth fibres, not downy as in moſt graſſes that inhabit looſe ſand. Theſe runners are for the moſt part clothed with the permanent baſes of the leaves, which are alternate, rigid, ſharp-pointed and hairy. Stipula a tuft of hairs. Stems a ſpan high, leafy, terminated by a cluſter of 3 or 4 linear purpliſh umbellate ſpikes, whoſe ſtalks are zigzag, angular, but not winged. Flowers ſolitary, leaning one way. Calyx of 2 valves only; but the ſtrict affinity between this ſpecies and *P. ſanguinale* forbids us to follow Juſſieu and others in making it a ſeparate genus. Corolla certainly of 2 valves, not of one only as deſcribed by Juſſieu. Thoſe valves being contrary, not oppoſite, to the calyx, might go further to eſtabliſh a generic character than any hitherto noticed.



March 1.1801. Published by J. Sowerby London.

RUBIA peregrina.
Wild Madder.

TETRANDRIA Monogynia.

GEN. CHAR. *Cor.* of one petal, bell-ſhaped, ſuperior. *Berries* 2, each with a ſingle ſeed.

SPEC. CHAR. Leaves about four in a whorl, elliptical; ſhining and ſmooth on their upper ſide. Flowers five-cleft.

SYN. Rubia peregrina. *Linn. Sp. Pl.* 158. *Sm. Fl. Brit.* 181. *Hudſ.* 65.

R. tinctorum. *With.* 193. *Hull.* 35.

R. ſylveſtris aſpera, quæ ſylveſtris Dioſcoridis. *Raii Syn.* 223.

THE Wild Madder is not unfrequent in South Wales, Cornwall, Devonſhire, St. Vincent's rocks Briſtol, and ſome few other places in the ſouth-weſt part of England. It grows among buſhes on a rich or loamy ſoil, flowering in July, and ripening its berries rather late in the autumn.

Roots perennial, creeping, their inner bark red or orange-coloured, having the property of dyeing red like the *R. tinctorum*, from which however this ſpecies is moſt decidedly diſtinct, and from which it may be known by the ſmooth (though finely granulated) upper ſurface of its leaves. The herb in mild winters is ever-green. Stems branched, ſquare, prickly, brittle, and, when not ſupported, procumbent. Leaves rigid, four (rarely five or ſix) in a whorl, reflexed, ſhining, elliptical, broader and leſs pointed than thoſe of *R. tinctorum*, very rough with little hooked prickles on the margin and nerve. Panicles forked, terminal. Calyx none. Corolla almoſt univerſally 5-cleft, with 5 ſtamina, yellowiſh green, concave, but ſhallow. Germen ſmooth. Berries in pairs, deep-black; one of them often abortive.

Published by J. Sowerby, London.

ARENARIA rubra.

Purple Sandwort.

DECANDRIA Trigynia.

GEN. CHAR. *Cal.* 5-leaved, ſpreading. *Petals* 5, undivided. *Capſule* ſuperior, of 1 cell, with many ſeeds.

SPEC. CHAR. Leaves linear, tipped with a ſmall briſtle. Stipulæ membranous, ſheathing. Seeds compreſſed, angular, roughiſh.

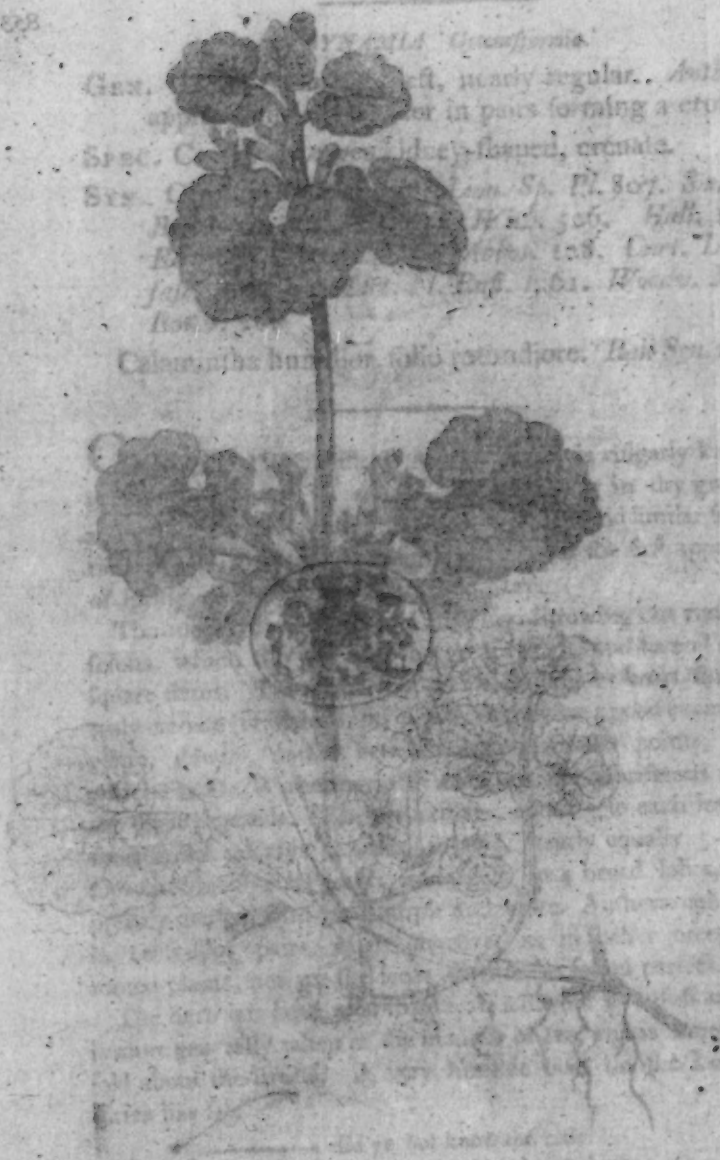
SYN. Arenaria rubra. *Linn. Sp. Pl.* 606. *Sm. Fl. Brit.* 479. *Hudſ.* 192. *With.* 422. *Hull.* 96. *Relh.* 172. *Sibth.* 142. *Abbot.* 98.
Spergula purpurea. *Raii Syn.* 351.

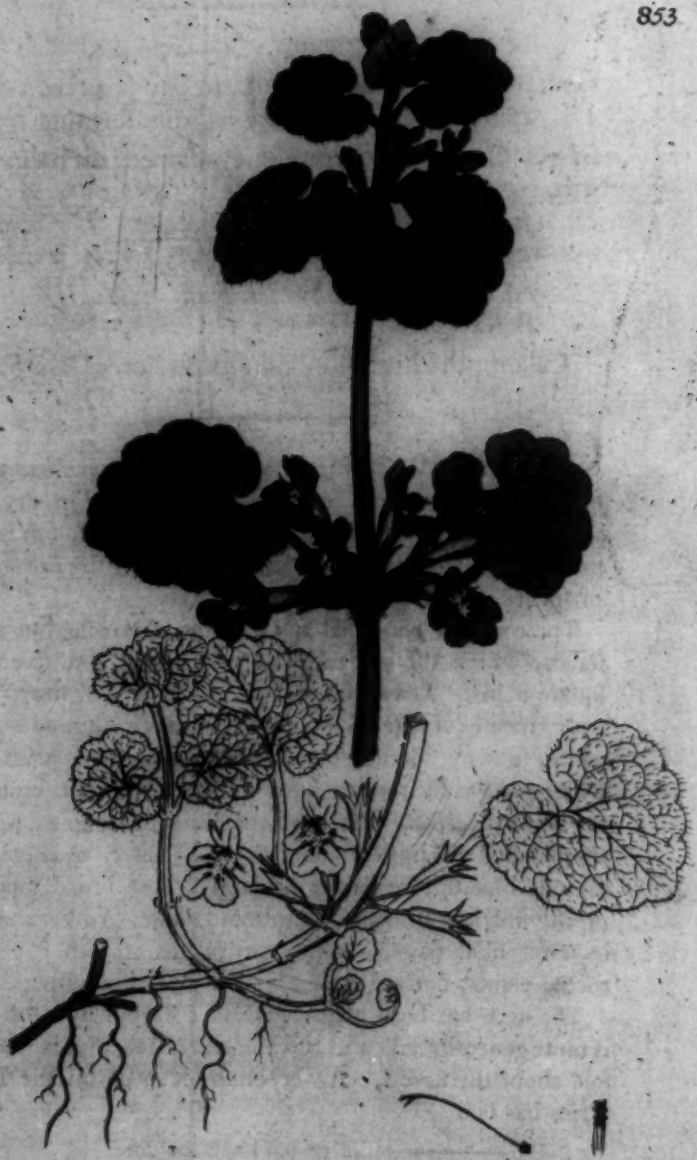
THIS ſpecies of *Arenaria* is one of the moſt common in dry ſandy fields, ſpreading widely on the ground, and flowering in July and Auguſt; but the bloſſoms expand only in bright weather, when their beauty and brilliancy will be found worthy of an accurate examination.

Root ſmall, ſpindle-ſhaped, branched, annual. Stems proſtrate, branched, ſpreading in a circular form, flaccid, leafy, round, ſmooth, a little tumid at their joints. Leaves flat, linear, narrow, pointed, entire, tipped with a ſmall briſtle, glaucous or rather hoary, ſomewhat ſucculent, nearly the length of each correſponding joint of the ſtem, and connected at their baſe by a pair of white membranous cloven ſtipulæ. Panicles terminal, leafy, forked, their terminations racemoſe; their flower-ſtalks downy and viſcid. Calyx of 5 hairy leaves, without ribs, their margin membranous. Petals generally ſhorter than the calyx. Capſule equal to the calyx, ovate, of 3 valves. Seeds numerous, pale-brown, compreſſed, of an angular and ſomewhat wedge-like figure, rough on their outer edge with little ſharp tubercles. By the figure of the ſeeds and the briſtles that terminate the leaves, this plant is diſtinguiſhed from *A. marina* and its varieties, which we hope on ſome future occaſion to illuſtrate.

GLECHOMA hederacea.

Ground Ivy.





March 1.1801 Published by J.T. Forster, Leadenhall Street.

GLECHOMA hederacea.

Ground-Ivy.

DIDYNAMIA Gymnoſpermia.

GEN. CHAR. *Cal.* 5-cleft, nearly regular. *Antheræ* approaching each other in pairs forming a croſs.

SPEC. CHAR. Leaves kidney-ſhaped, crenate.

SYN. Glechoma hederacea. *Linn. Sp. Pl.* 807. *Sm. Fl. Brit.* 625. *Hudſ.* 254. *With.* 526. *Hull.* 125. *Relh.* 225. *Sibth.* 183. *Abbot.* 128. *Curt. Lond. faſc.* 2. *t.* 44. *Mart. Fl. Ruſt. t.* 61. *Woodv. Med. Bot. t.* 28.

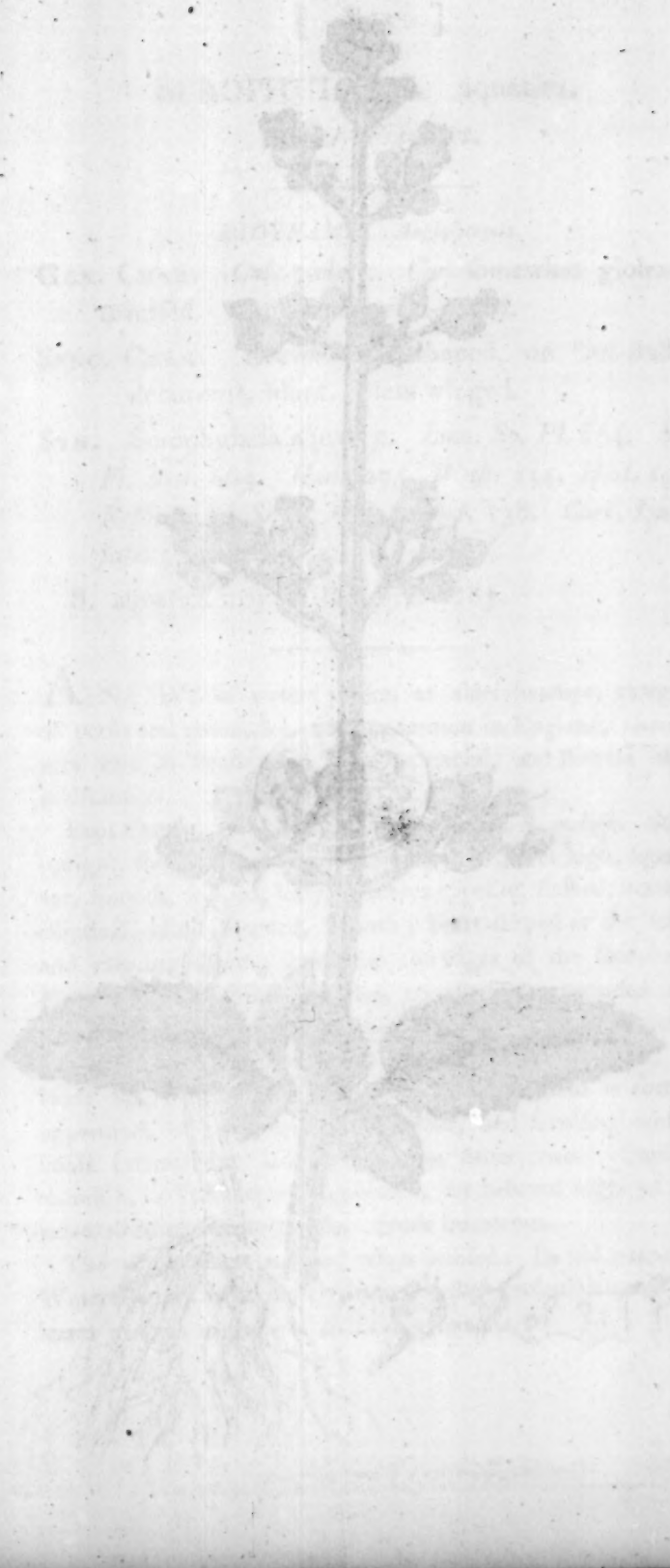
Calamintha humilior, folio rotundiore. *Raii Syn.* 243.

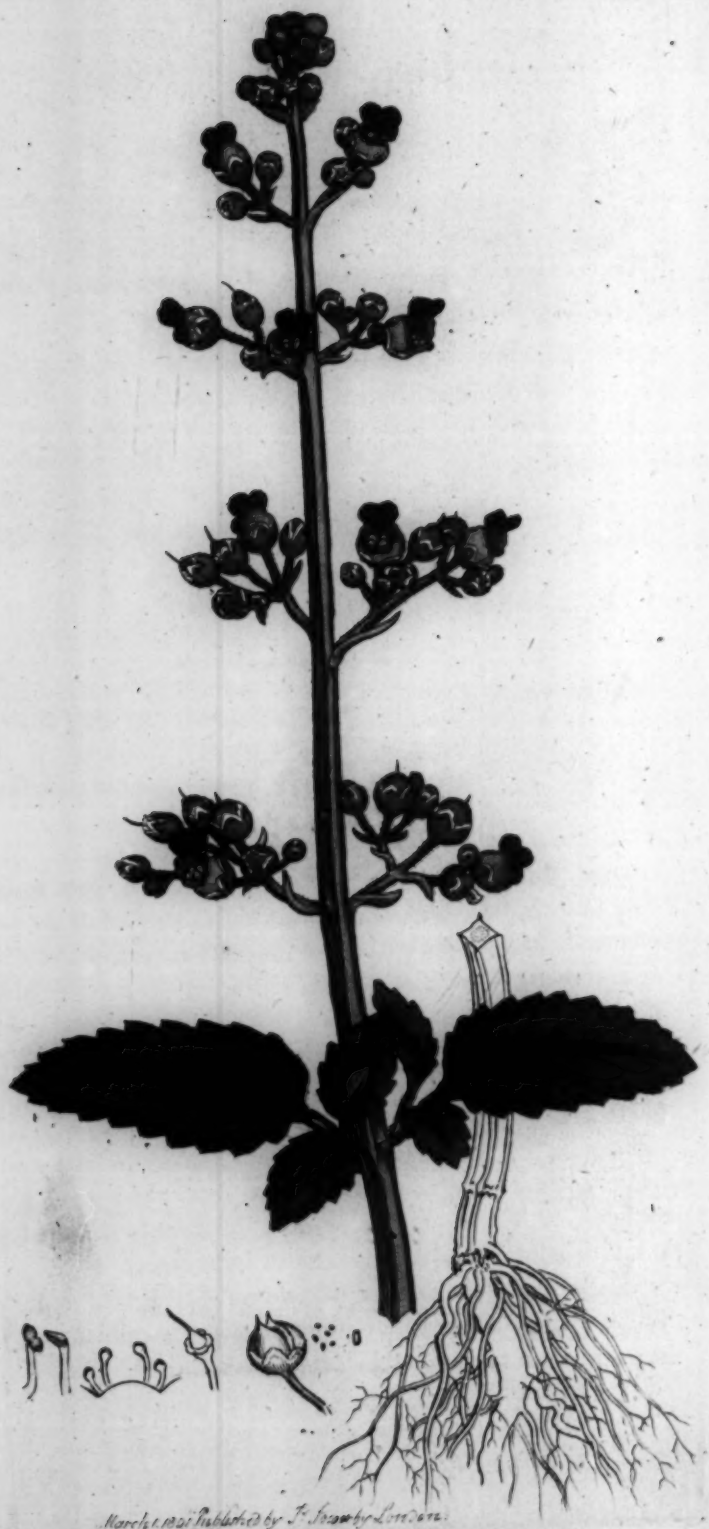
GROUND-IVY, Gill, or Alehoof, for it is vulgarly known by all thoſe names, is a very common plant in dry groves, about hedge-banks, under park walls or pales, and ſimilar ſituations, where it puts forth its fragrant foliage on the firſt approach of ſpring, and flowers in April and May.

The roots are perennial and creeping, throwing out running ſcions, which alſo take root to a great extent, and ſeveral weak ſquare ſtems. Leaves on foot-ſtalks, kidney or heart-ſhaped, truly crenate (of which kind of margin they are a good example), veiny, downy, dotted beneath with glandular points, from which, as Dr. Withering juſtly obſerves, the odoriferous oil of the plant proceeds. Flowers axillary, about 3 to each leaf, on ſhort ſtalks. Calyx tubular, ſtriated, nearly equally 5-cleft. Corolla blueiſh; its under lip largeſt, in 4 broad lobes, and prettily marked with dark-purple and white. Antheræ cohering in croſs-like pairs, often abortive, as in other creeping-rooted plants, nor are the ſeeds often to be found perfect.

The herb has been uſed to give ale a flavour by infuſion, but is more generally taken in the manner of tea, and is ſometimes ſold about the ſtreets. A very humble poet on the London Cries has ſaid

> "———— did ye but know the taſte
> Of home-found ivy, ye would ne'er explore
> For foreign ſhrubs a diſtant Indian ſhore."





March 1 1821 Published by J. Sowerby London.

SCROPHULARIA aquatica.

Water Figwort.

DIDYNAMIA Angiospermia.

GEN. CHAR. *Cal.* 5-cleft. *Cor.* somewhat globose, reversed. *Caps.* superior, 2-celled.

SPEC. CHAR. Leaves heart-shaped, on foot-stalks, decurrent, blunt. Stem winged.

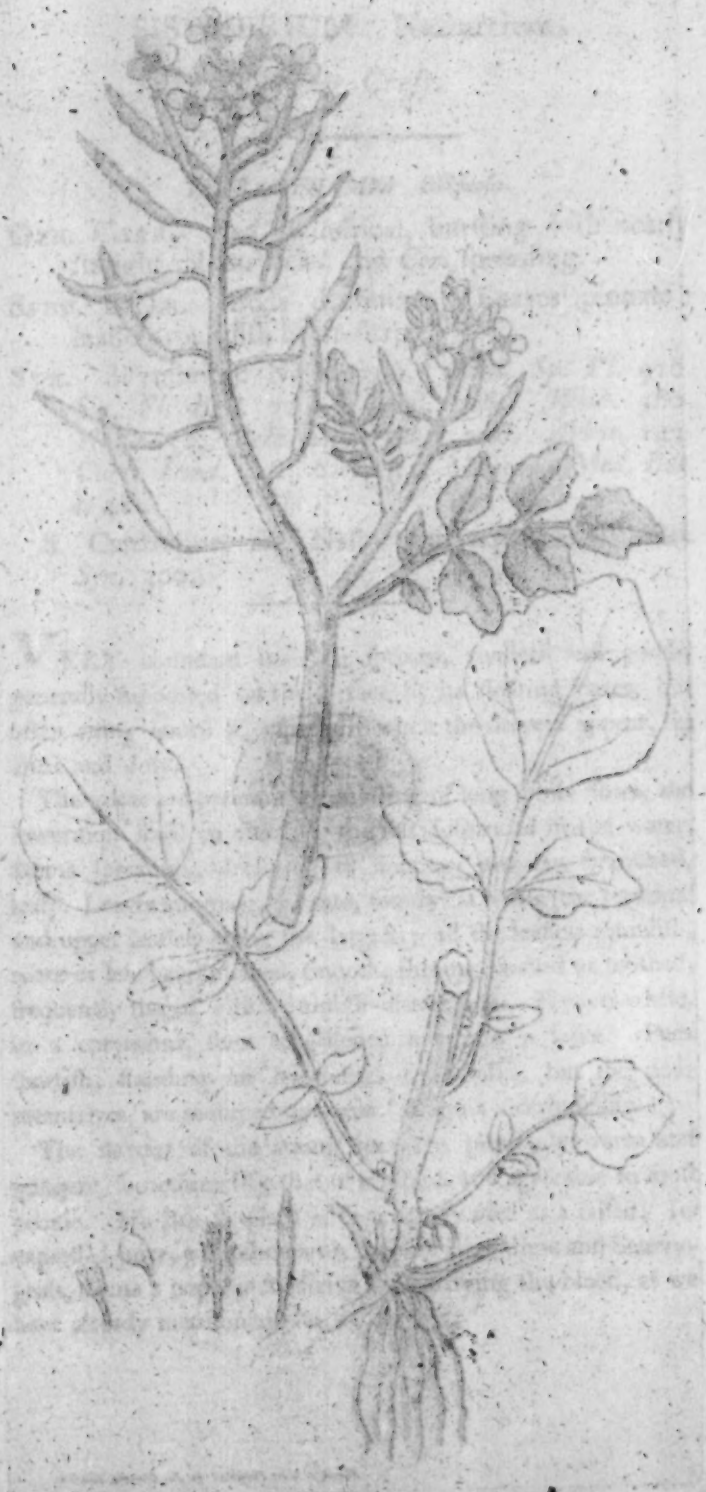
SYN. Scrophularia aquatica. *Linn. Sp. Pl.* 864. *Sm. Fl. Brit.* 663. *Hudf.* 275. *With.* 554. *Hull.* 138. *Relh.* 244. *Sibth.* 196. *Abbot.* 138. *Curt. Lond. fasc.* 5. *t.* 44.

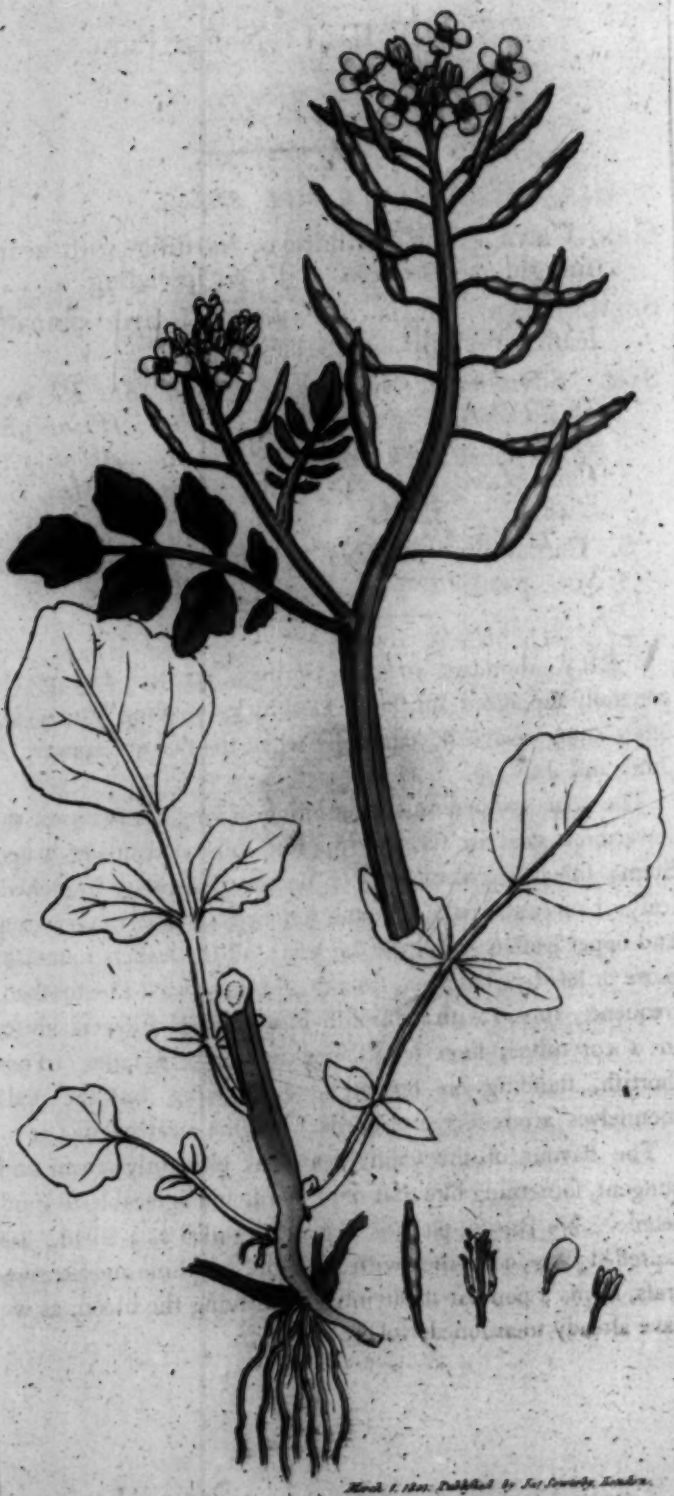
S. aquatica major. *Raii Syn.* *283.

A NATIVE of watery places, as alder-swamps, margins of pools and rivers, &c. not uncommon in England, though very rare in Scotland. It is perennial, and flowers after midsummer.

Root fibrous, not knotty as in the upland *S. nodosa*. Stem upright, straight, and nearly simple, 3 or 4 feet high, square, very smooth, winged, leafy. Leaves opposite, stalked, ovate or elliptical, blunt, serrated, smooth; heart-shaped at the base, and running down a little upon the edges of the foot-stalk. Flowers in small forked panicles, oppositely compounded into a long leafless (though bracteated) racemus. Calyx smooth, deeply five-cleft. Corolla with a greenish inflated tube; its lower lip, which from the flower being reversed is turned uppermost, of a dull dark blood-colour, and furnished with a small intermediate lobe within the other two. Capsule roundish, a little depressed, pointed, the inflexed edges of its valves dividing it into 2 cells. Seeds numerous.

The whole plant is fœtid when bruised. Its old name of Water Betony arose merely from the slight resemblance of its leaves in form to those of *Betonica officinalis*.





March 1, 1831. Published by Jas Sowerby, London.

SISYMBRIUM Naſturtium.

Water Creſs.

TETRADYNAMIA Siliquoſa.

GEN. CHAR. *Pod* cylindrical, burſting with nearly ſtraight valves. *Cal.* and *Cor.* ſpreading.

SPEC. CHAR. Pods declining. Leaves pinnate: leaflets roundiſh heart-ſhaped.

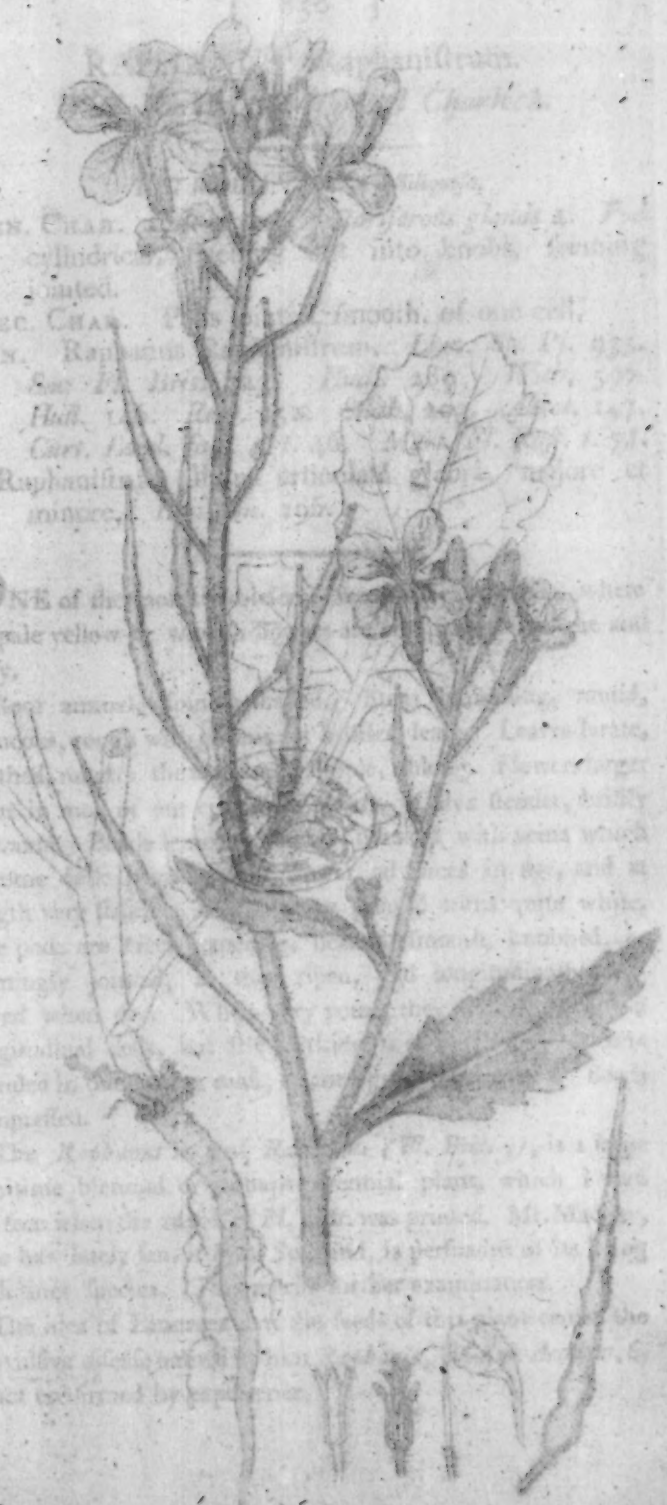
SYN. Siſymbrium Naſturtium. *Linn. Sp. Pl.* 916. *Sm. Fl. Brit.* 700. *Hudſ.* 296. *With.* 580. *Hull.* 150. *Relh.* 256. *Sibth.* 206. *Abbot.* 143. *Curt. Lond. faſc.* 6. *t.* 44. *Woodv. Med. Bot. t.* 48.

S. Cardamine, ſeu Naſturtium aquaticum. *Raii Syn.* 300.

VERY abundant in clear ſprings, rivulets and ponds, generally ſupported on the ſurface by its floating leaves, but often riſing above it, eſpecially when the flowers appear, in June and July.

The roots are perennial, conſiſting of long white fibres, the lowermoſt fixed in the ſoil, the reſt ſuſpended in the water. Stems ſpreading, declining or floating, angular, branched, leafy. Leaves alternate, pinnate, ſomewhat lyrate (the terminal and upper leaflets being the largeſt); all the leaflets roundiſh, more or leſs heart-ſhaped, ſmooth, ſhining, waved or toothed, frequently tinged with a purpliſh-brown hue. Flowers white, in a corymbus, ſoon lengthened out into a ſpike. Pods ſhortiſh, ſtanding on horizontal fruit-ſtalks, but the pods themſelves are recurved upwards. Stigma nearly ſeſſile.

The flavour of the young leaves is pleaſantly warm and pungent, ſomething like that of muſtard, and agreeable to moſt people. No Britiſh plant is ſo generally uſed as a ſallad. Its expreſſed juice, combined with thoſe of Brooklime and Scurvy-graſs, forms a popular medicine for purifying the blood, as we have already mentioned, vol. 10. p. 655.



March 1. 1804. Published by J. Sowerby, London.

RAPHANUS Raphaniſtrum.

Wild Radiſh, or Jointed Charlock.

TETRADYNAMIA Siliquoſa.

GEN. CHAR. *Cal.* cloſed. *Nectariferous glands* 4. *Pod* cylindrical, ſwelling out into knobs, ſeeming jointed.

SPEC. CHAR. Pods jointed, ſmooth, of one cell.

SYN. Raphanus Raphaniſtrum. *Linn. Sp. Pl.* 935. *Sm. Fl. Brit.* 723. *Hudſ.* 289. *With.* 596. *Hull.* 146. *Relh.* 252. *Sibth.* 203. *Abbot.* 147. *Curt. Lond. faſc.* 4. *t.* 46. *Mart. Fl. Ruſt. t.* 71. Raphaniſtrum ſiliquâ articulatâ glabrâ, majore et minore. *Raii Syn.* 296.

ONE of the moſt troubleſome weeds in corn-fields, where its pale yellow or whitiſh flowers are conſpicuous in June and July.

Root annual, ſpindle-ſhaped. Stem branching, round, glaucous, rough with prominent briſtles, leafy. Leaves lyrate, toothed, rough: the uppermoſt ſimple, oblong. Flowers larger than in moſt of our cruciform plants. Calyx ſlender, briſtly upwards. Petals lemon-coloured, ſtreaked with veins which become dark purple as the flower advances in age, and at length very ſtriking, as the lemon ground turns quite white. The pods are erect, tapering, beaked, ſmooth, knobbed, or ſeemingly jointed, as they ripen, and longitudinally furrowed when dry. When very young they are divided into 2 longitudinal cells, but the partition is obliterated, and confounded in one ſpongy maſs, as they grow to maturity. Seeds compreſſed.

The *Raphanus* n. 3 of *Raii Syn.* (*Fl. Brit.* γ), is a large maritime biennial or perhaps perennial plant, which I had not ſeen when the 2d vol. of *Fl. Brit.* was printed. Mr. Mackay, who has lately ſent it from Scotland, is perſuaded of its being a diſtinct ſpecies. This merits further examination.

The idea of Linnæus that the ſeeds of this plant cauſed the convulſive diſeaſe named by him *Raphania*, ſee *Am. Acad. v.* 6, is not confirmed by experience.

March 1. 1801. Published by Jas. Sowerby, London.

LICHEN Turneri.

Mealy Fleſh-coloured Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, ſcattered warts.

Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

SPEC. CHAR. Leprous, very mealy, greeniſh-white. Shields fleſh-coloured, powdery, with a very thick, rounded, entire, mealy margin, of the colour of the cruſt.

SYN. . . . . .

WE have not been able to refer this *Lichen* to any mentioned in Dr. Acharius's claſſical work; and preſuming it therefore to be nondeſcript, have named it in honour of Mr. Dawſon Turner, to whom we are obliged for it, and whoſe labours in the inveſtigation of the whole genus have well entitled him to ſuch a diſtinction.

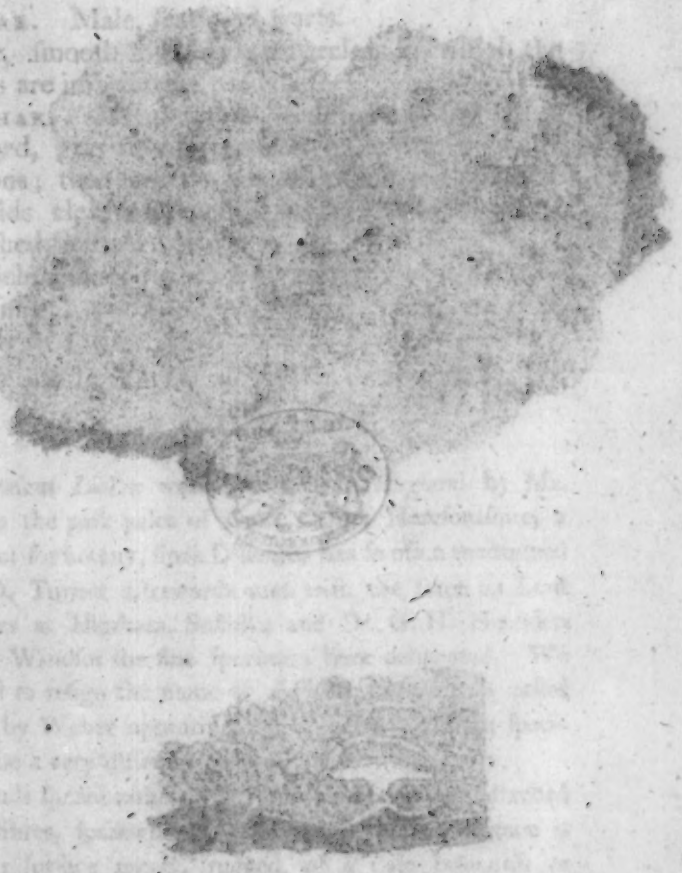
There is reaſon to believe that the cruſt is not unfrequent on the barks of old oaks and other trees, forming an unequal, indeterminate, ſoft, powdery ſubſtance, of a grayiſh white when dry, greeniſh in a moiſt ſtate, which may eaſily be overlooked for *L. fagineus*, and as few ſpecies are more rare in fruit, the ſhields have eſcaped notice. When they occur, however, they are too elegant and conſpicuous to be confounded with any others. They are a little elevated; their diſk flat, powdery, fleſh coloured, almoſt orange when young, and at all times of a deeper hue within. They are encompaſſed by a thick, rounded, prominent, undivided border, of the colour and ſubſtance of the cruſt.

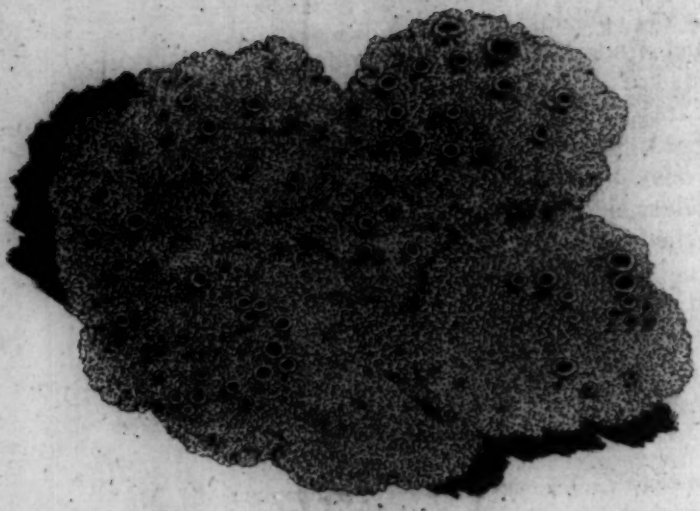
The figure of Wulfen's *L. albo-flaveſcens*, *Jacq. Coll. v.* 3. 111. *t.* 5. *f.* 1, bears ſome reſemblance to this plant; but the cruſt is deſcribed as "compact, even, firmly adhering to the bark, ſet with warty tubercles, ſmooth and white," all which is foreign to our *L. Turneri*, which is remarkable for its ſoft mealineſs, and which indeed nearer approaches *L. Hæmatomma**, *Engl. Bot. t.* 486; but the cruſt of that is leſs mealy, whiter, more uniform, and the ſhields ſmaller, much more numerous, leſs prominent, with a perfectly ſmooth, waxy diſk, of a more vivid red.

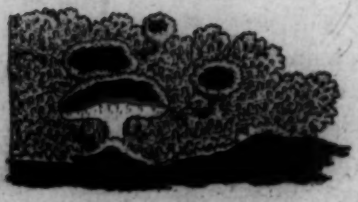
* We are now convinced the original *Hæmatomma* of Ehrhart is our *coccineus*, *t.* 223.

LICHEN *aleuriticus*.

Mealy Eye-ending Lichen.







March 1. 1801. Published by Jas. Sowerby, London.

LICHEN aleurites.

Mealy Spreading Lichen.

CRYPTOGAMIA Algæ.

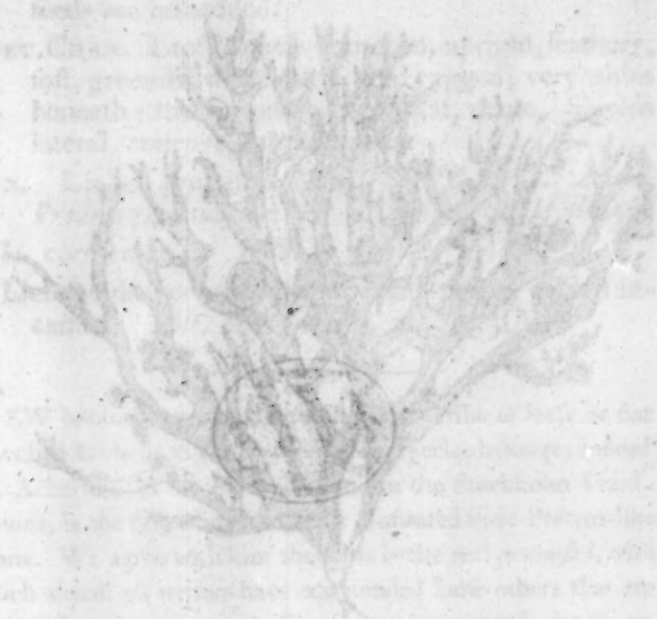
GEN. CHAR. Male, ſcattered warts.
Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

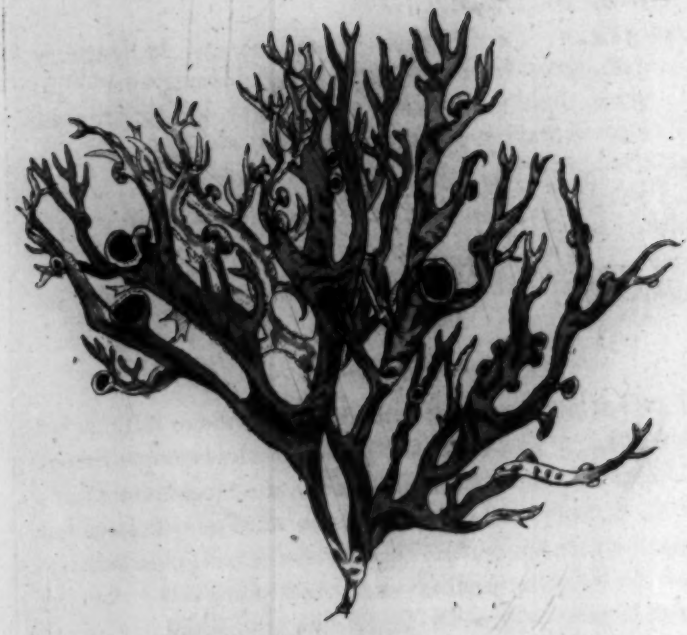
SPEC. CHAR. Membranous, imbricated, ſpreading, rugged, grayiſh-white, mealy; beneath gray and fibrous; the ſegments lobed, criſped and notched. Shields elevated, reddiſh-brown, with a white, notched, narrow border.

SYN. Lichen aleurites. *Achar. Prodr.* 117.
L. diffuſus. *Dickſ. Crypt. faſc.* 3. 17. *t.* 9. *f.* 6. *With. v.* 4. 32. *Hull.* 294.
Lobaria diffuſa. *Hoffm. Fl. Germ. v.* 2. 156.

THE preſent *Lichen* was diſcovered in England by Mr. Dickſon on the park pales of Croft Caſtle, Herefordſhire, a claſſical ſpot for botany, ſince Dillenius has ſo often mentioned it. Mr. D. Turner afterwards met with the ſame on Lord Rous's pales at Henham, Suffolk; and Dr. G. H. Noehden found near Windſor the fine ſpecimen here delineated. We are obliged to reſign the name of *diffuſus*, the plant ſo called originally by Weber appearing, by authentic German ſpecimens, to be a very different ſpecies.

The fronds ſpread rather looſely over old dead wood, attached by ſmall fibres, ſomewhat imbricated. Their ſubſtance is thin; their ſurface mealy, rugged, of a pale browniſh or yellowiſh gray; their margin lobed, laxly elevated, crenate, ſmooth. The centre of the plant in time becomes a congeries of powdery lumps and ſwellings, without any leafy appearance. The ſhields are of various ſizes, round when young, afterwards irregular, and frequently lobed, elevated on conſiderable ſtalks; their diſk flat, ſmooth, of a ruſty or cheſnut brown; their margin narrow, a little elevated, white, irregularly notched, inflexed.





April 1, 1801. Published by Jas Sowerby, London.

LICHEN prunaſtri.

Ragged hoary Lichen.

CRYPTOGAMIA Algæ.

GEN. CHAR. Male, ſcattered warts.

Female, ſmooth ſhields or tubercles, in which the ſeeds are imbedded.

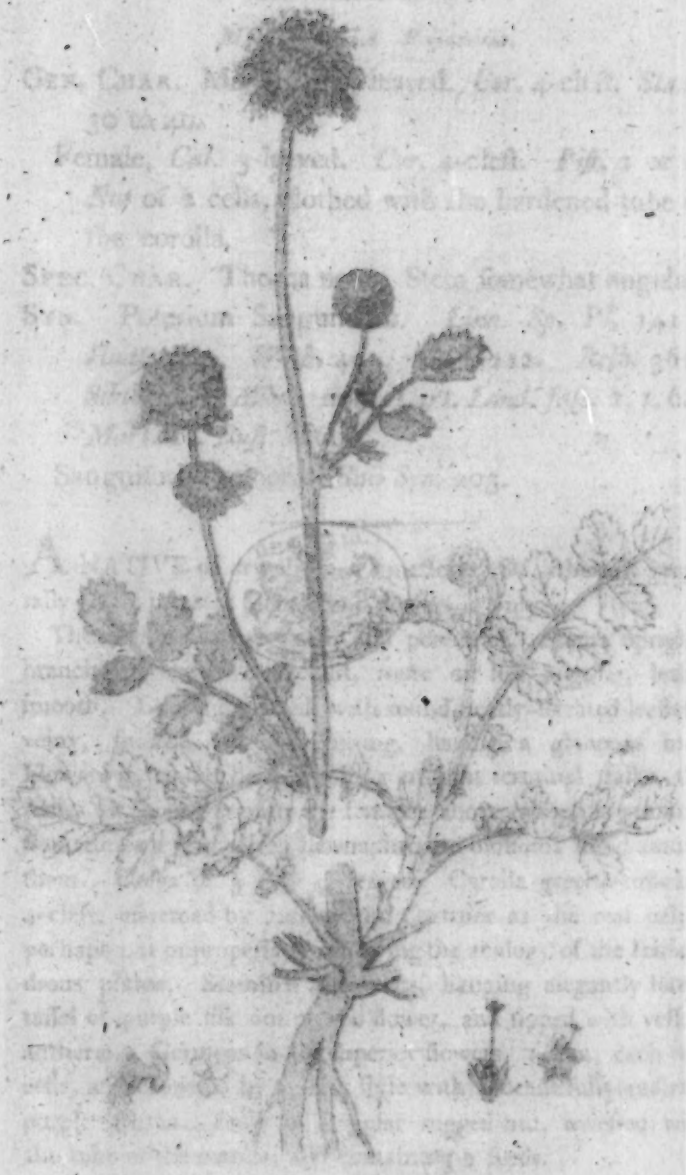
SPEC. CHAR. Leafy, much-branched, upright, leathery, ſoft, greeniſh-white, pitted and rugged; very white beneath; the ſegments linear, flat, acute. Shields lateral, concave, bright-brown.

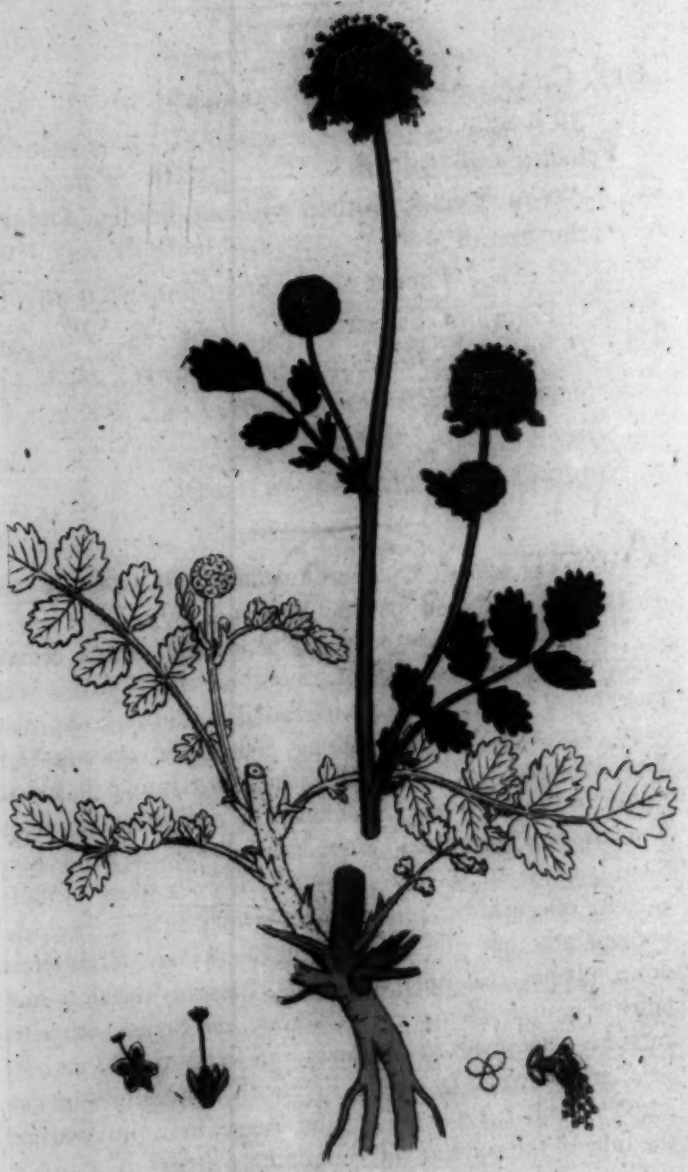
SYN. Lichen prunaſtri. *Linn. Sp. Pl.* 1614. *Achar. Prodr.* 174. *Hudſ.* 541 β? *With. v.* 4. 52. *Hull.* 296.

L. corniculatus. *Relh.* 433.

Lichenoides cornutum bronchiale molle, ſubtus incanum. *Dill. Muſc.* 160. *t.* 21. *f.* 55 A.

FEW botaniſts have well underſtood the tribe of leafy or flat branched Lichens to which the preſent ſpecies belongs; indeed Dr. Acharius, in his *Prodromus* and in the Stockholm Tranſactions, is the firſt who has clearly illuſtrated their Proteus-like forms. We agree with him that this is the real *prunaſtri*, with which almoſt all writers have confounded ſome others that are diſtinct from it, apparently from being ignorant of the fructification, which even Dillenius never knew. It was firſt found in England by the late Rev. Mr. Bryant, and conſiſts of large cheſnut ſhields with an entire white edge, entirely different from the ſhields of the common Lichens that have been confounded with this, and which we ſhall take an opportunity of illuſtrating when we have ſettled them all by communication of original ſpecimens with Dr. Acharius. In the mean time the *prunaſtri*, which is common on the branches of old trees, may eaſily be known without its fructification, (which is very rare, and which we received from Mr. Templeton and Mr. Salt), by its ſoft and pliable texture, and diffuſe much-branched form. Mr. Relhan rightly diſtinguiſhed it from what he then thought *prunaſtri*, by the name of *corniculatus*.





April 1. 1806. Published by J.t Sowerby Londres.

POTERIUM Sanguiſorba.

Common Burnet.

MONOECIA Polyandria.

GEN. CHAR. Male, *Cal.* 3-leaved. *Cor.* 4-cleft. *Stam.* 30 to 40.

Female, *Cal.* 3-leaved. *Cor.* 4-cleft. *Piſt.* 1 or 2. *Nut* of 2 cells, clothed with the hardened tube of the corolla.

SPEC. CHAR. Thorns none. Stem ſomewhat angular.

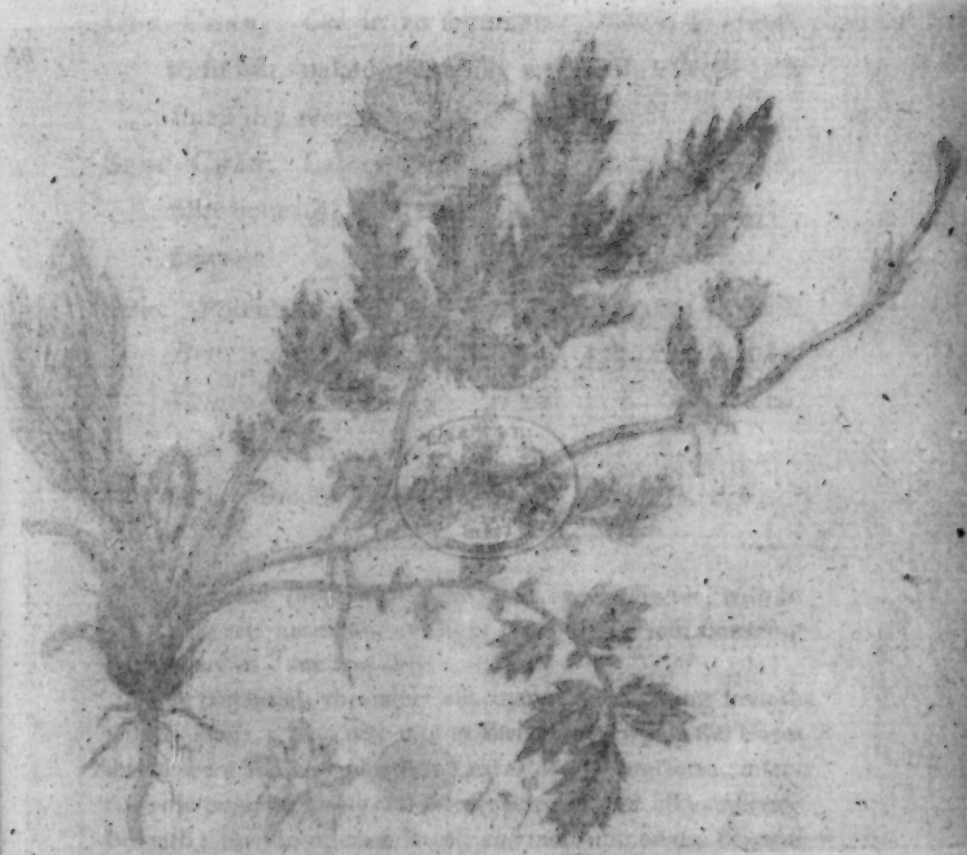
SYN. Poterium Sanguiſorba. *Linn. Sp. Pl.* 1411. *Hudſ.* 421. *With.* 493. *Hull.* 212. *Relh.* 362. *Sibth.* 168. *Abbot.* 209. *Curt. Lond. faſc.* 2. *t.* 64. *Mart. Fl. Ruſt. t.* 69.

Sanguiſorba minor. *Raii Syn.* 203.

A NATIVE of dry chalk or limeſtone hills, where it generally grows in great plenty, and flowers in July.

The root is ſtrong, woody and perennial. Stems upright, branched, various in height, more or leſs angular, leafy, ſmooth. Leaves pinnated, with round neatly-ſerrated leaflets, veiny, ſmooth but not ſhining, having a glaucous hue. Flowers in round heads on long upright terminal ſtalks, the males in the lower part, the females above, which is unuſual. Sometimes a few barren hermaphrodite bloſſoms ſtand among them. Calyx of 3 (not 4) leaves. Corolla green, tubular, 4-cleft, eſteemed by Juſſieu and Gærtner as the real calyx, perhaps not improperly, conſidering the analogy of the Icoſandrous plants. Stamina numerous, hanging elegantly like a taſſel of purple ſilk out of the flower, and tipped with yellow antheræ. Germens in the ſuperior flowers, 1 or 2, each of 2 cells, and crowned by a long ſtyle with a beautifully-radiated purple ſtigma. Fruit an angular rugged nut, inveſted with the tube of the corolla, and containing 2 ſeeds.

The leaves taſte and ſmell like cucumber, and are uſed to give that flavour to ſallads.



Curtis's Botanical Magazine, Pl. Seventy, London.

POTENTILLA anſerina.

Silver-weed, or Wild Tanſey.

ICOSANDRIA Polygynia.

GEN. CHAR. *Cal.* in 10 ſegments. *Petals* 5. *Seeds* roundiſh, naked, generally wrinkled, affixed to a ſmall dry receptacle.

SPEC. CHAR. Leaves interruptedly pinnated, ſerrated, ſilky beneath. Stem creeping. Flower-ſtalks ſingle-flowered.

SYN. Potentilla anſerina. *Linn. Sp. Pl.* 710. *Sm. Fl. Brit.* 548. *Hudſ.* 222. *With.* 473. *Hull.* 112. *Relh.* 196. *Sibth.* 161. *Abbot.* 113. *Curt. Lond. faſc.* 3. *t.* 31.

Pentaphylloides Argentina dicta. *Raii Syn.* 256.

AN elegant though common plant, generally met with in oſier-holts and meadows, in a light black ſpongy ſoil, flowering principally in June and July.

Root perennial, throwing out many long trailing ſmooth reddiſh ſtems, which take root at their joints, where the leaves and flowers alſo come forth. Leaves of a lyrate form, interruptedly pinnate, deeply and ſharply ſerrate, moſt ſilky or ſilvery beneath; the radical ones largeſt and moſt numerous. Stipulæ acute, entire. Flower-ſtalks ſimple, ſolitary, moſtly upright, but ſometimes depreſſed, each bearing a large handſome bright-yellow flower. Calyx hairy, its ſmaller intermediate ſegments generally notched. Petals roundiſh, or but ſlightly emarginate. Germens very hairy. Seeds ſeldom perfected.—Sometimes the leaves are ſmooth, and deſtitute of that ſilky down which gives them their chief beauty.

This cannot be confounded with any other Britiſh *Potentilla*.

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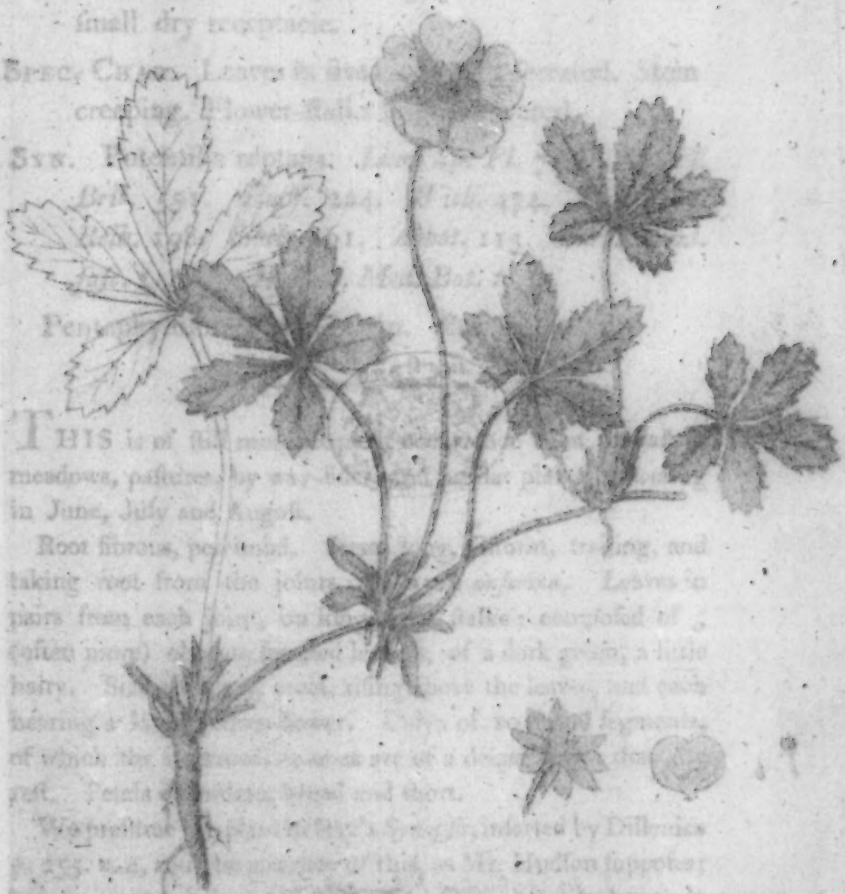
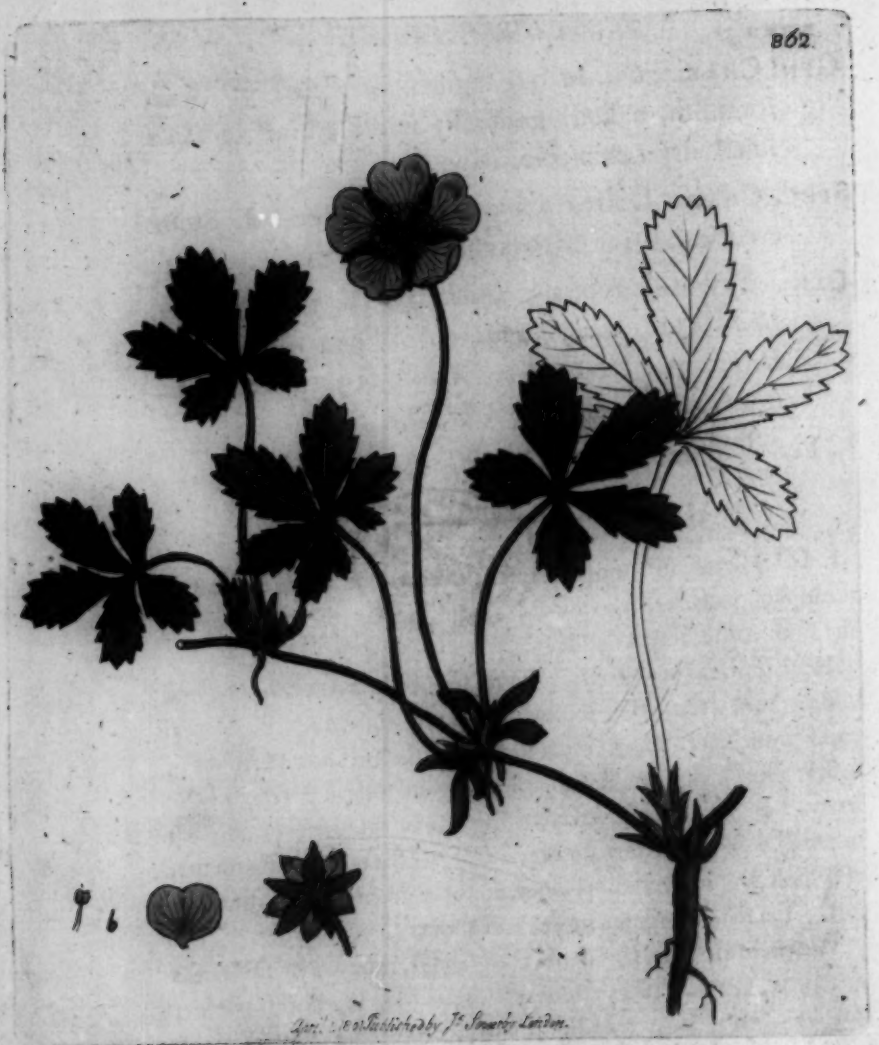
POTENTILLA reptans.

Common creeping Cinquefoil.





Jan.ʸ 1. 1801 Published by Jᵃˢ Sowerby London.

POTENTILLA reptans.

Common creeping Cinquefoil.

ICOSANDRIA Polygynia.

GEN. CHAR. *Cal.* in 10 ſegments. *Petals* 5. *Seeds* roundiſh, naked, generally wrinkled, affixed to a ſmall dry receptacle.

SPEC. CHAR. Leaves in fives, obovate, ſerrated. Stem creeping. Flower-ſtalks ſingle-flowered.

SYN. Potentilla reptans. *Linn. Sp. Pl.* 714. *Sm. Fl. Brit.* 551. *Hudſ.* 224. *With.* 474. *Hull.* 113. *Relh.* 198. *Sibth.* 161. *Abbot.* 113. *Curt. Lond. faſc.* 1. *t.* 37. *Woodv. Med. Bot. t.* 59.

Pentaphyllum vulgatiſſimum. *Raii Syn.* 255.

THIS is of ſtill more frequent occurrence than the laſt in meadows, paſtures, by way-ſides, and ſimilar places, flowering in June, July and Auguſt.

Root fibrous, perennial. Stems long, filiform, trailing, and taking root from the joints, as in *P. anſerina*. Leaves in pairs from each joint, on long erect ſtalks; compoſed of 5 (often more) obovate ſerrated leaflets, of a dark green, a little hairy. Stalks ſolitary, erect, riſing above the leaves, and each bearing a large yellow flower. Calyx of 10 entire ſegments, of which the intermediate ones are of a deeper green than the reſt. Petals obcordate, broad and ſhort.

We preſume the plant in Ray's *Synopſis*, inſerted by Dillenius *p.* 255. *n.* 4, muſt be a variety of this, as Mr. Hudſon ſuppoſes; but we cannot help totally diſſenting from that gentleman in referring *Tormentilla reptans* to the ſame ſpecies, as the ſlighteſt inſpection will prove it totally diſtinct, though occaſionally bearing ſome five-cleft flowers.

April 1. 1801 Published by J.S. Somerby London.

TORMENTILLA officinalis.

Common Tormentil.

ICOSANDRIA Polygynia.

GEN. CHAR. *Cal.* in 8 ſegments. *Petals* 4. *Seeds* roundiſh, naked, wrinkled, affixed to a ſmall dry receptacle.

SPEC. CHAR. Stem aſcending, branched. Leaves ſeſſile.

SYN. Tormentilla officinalis. *Sm. Fl. Brit.* 552. *With.* 476. *Curt. Lond. faſc.* 5. *t.* 35.

T. erecta. *Linn. Sp. Pl.* 716. *Hudſ.* 225. *Hull.* 112. *Relh.* 198. *Woodv. Med. Bot. t.* 9.

Tormentilla. *Raii Syn.* 257.

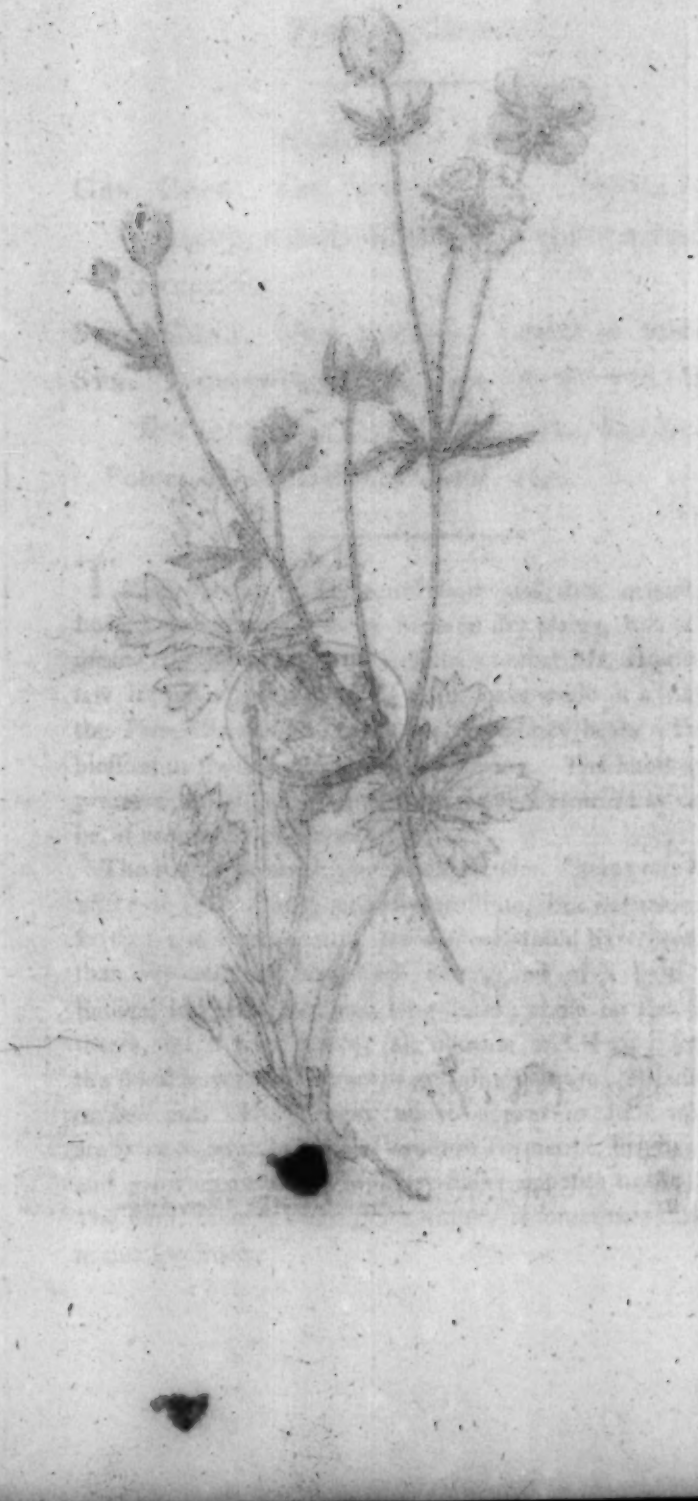
Potentilla Tormentilla. *Sibth.* 162. *Abbot.* 114.

COMMON in barren paſtures, eſpecially on heaths among ling and other ſmall ſhrubs, which are beſpangled with its little bright bloſſoms in June and July.

The root is remarkably large and woody, endued with an eminent degree of aſtringency, whence it has been long ago admitted into the catalogue of officinal plants. Stems weak, ſlender and wiry, generally ſupporting themſelves upon the ſurrounding plants, often procumbent, branched, round, leafy, clothed with ſhort ſoft erect hairs. Leaves ſeſſile or nearly ſo, ternate, deeply ſerrated, accompanied by a pair of deeply divided ſtipulæ. Flowers on long capillary ſolitary ſtalks, placed oppoſite to the leaves, or rather in the forks of the branches. Segments of the calyx ovate, alternately ſmaller, hairy. Petals inverſely heart-ſhaped, yellow. Germens hairy. Seeds few, rugged.

Miſs Johnes obſerved one plant at Hafod in which all the flowers were double. We never heard of another inſtance of the kind, either in this genus or *Potentilla*.

Some flowers are occaſionally found with 5 petals and 10 ſegments of the calyx; yet this happens ſo rarely, and the two ſpecies of *Tormentilla* accord ſo well in habit, that we are not convinced of the propriety of conſidering them as *Potentillæ*.



TORMENTILLA reptans.

Trailing Tormentil.

ICOSANDRIA Polygynia.

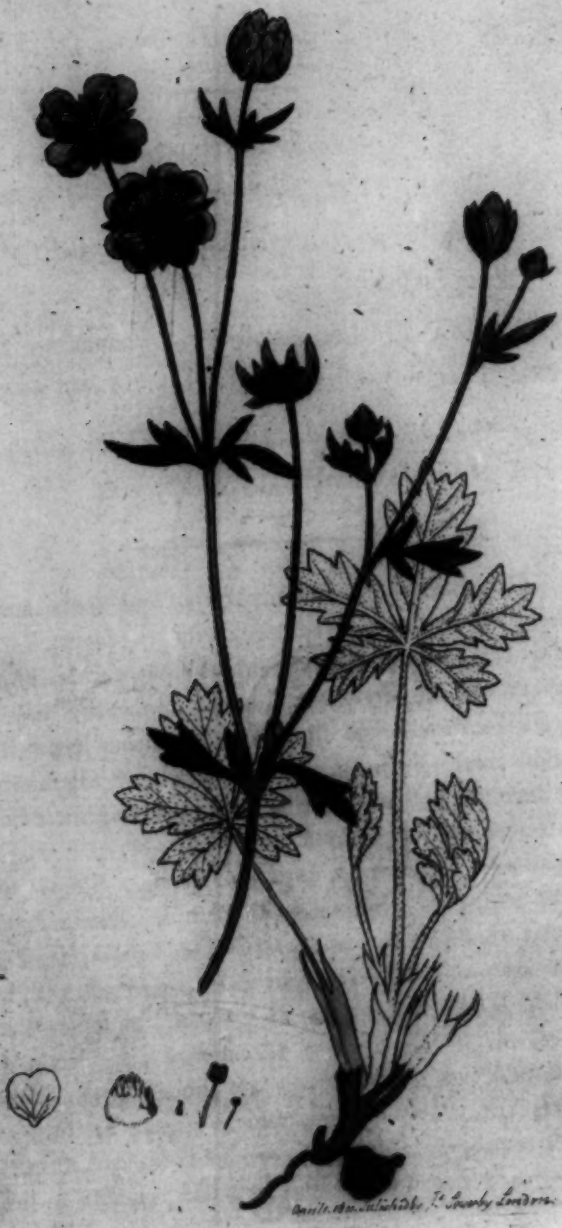
GEN. CHAR. *Cal.* in 8 ſegments. *Petals* 4. *Seeds* roundiſh, naked, wrinkled, affixed to a ſmall dry receptacle.

SPEC. CHAR. Stem proſtrate. Leaves on footſtalks.

SYN. Tormentilla reptans. *Linn. Sp. Pl.* 716. *Sm. Fl. Brit.* 553. *With.* 476. *Hull.* 112. *Raii Syn.* 257. Potentilla procumbens. *Sibth.* 162.

THIS ſpecies of Tormentil now and then occurs about hedges and the borders of fields in dry places, but is by no means common. We even doubt whether Mr. Hudſon ever ſaw it; elſe he ſurely would never have made it a variety of the *Potentilla reptans*, though it ſometimes bears a five-cleft bloſſom in the beginning of its flowering. The habit and appearance are as little like that ſpecies of *Potentilla* as can well be, if accurately examined.

The root is perennial, ſmall and ſlender. Stems one or two; 18 or 20 inches long, entirely proſtrate, but not taking root, ſo that the ſpecific name *procumbens* would have been better than *reptans*. Whole herb hairy, and of a light green. Radical leaves in fives, on long ſtalks; thoſe on the ſtem in threes, on ſhorter ſtalks; all obovate and deeply ſerrated; the floral leaves ſeſſile, narrow and almoſt entire. Stipulæ more or leſs cut. The flowers, which appear in June and July, are twice as large as in the Common Tormentil, bright yellow, and grow on very long capillary ſtalks oppoſite to the leaves. The ſtem, though often quite ſimple, is ſometimes divided as in our ſpecimen.



Curtis del. et lith. Pub.ed 1st Jan.y 1806 by Curtis Brompton Row.

TORMENTILLA reptans.

Trailing Tormentil.

ICOSANDRIA Polygynia.

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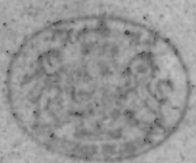
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